

TS

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.H38













JAMES L. HAVEN & CO.'S

ILLUSTRATED

*Catalogue and Price List*

OF

**HARDWARE**

AND

**IMPLEMENTS.**

**No. 10.**

WAREHOUSE:

*No. 56 PLUM STREET.*

Factories Adjoining:

*Fronting over 700 Feet on Second, Elm & Commerce Sts.*

CINCINNATI, O.

---

TIMES AND CHRONICLE STEAM BOOK AND JOB OFFICE.

No. 62 WEST THIRD STREET.

TS285  
H38

# DISCOUNTS & TERMS TO THE TRADE

FURNISHED ON APPLICATION.

CA 10-2342

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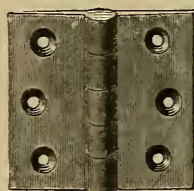
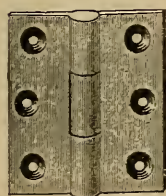
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# BUILDERS' HARDWARE.

## CAST BUTTS.

PACKED IN PAPER BOXES.



### NARROW—FAST JOINT.

Size.	per doz. prs.	Size.	per doz. prs.	Size.	per doz. prs.
1 $\frac{1}{2}$ inch.	- - \$0 36	2 $\frac{3}{4}$ inch.	- - \$0 72	4 inch,	- - \$1 40
1 $\frac{3}{4}$ "	- - 38	3 "	- - 83	4 $\frac{1}{2}$ "	- - 1 90
2 "	- - 40	3 $\frac{1}{4}$ "	- - 96	5 "	- - 2 30
2 $\frac{1}{4}$ "	- - 50	3 $\frac{1}{2}$ "	- - 1 15	6 "	- - 3 50
2 $\frac{1}{2}$ "	- - 60	3 $\frac{3}{4}$ "	- - 1 28		

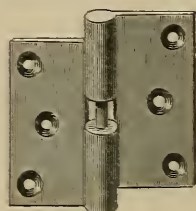
### BROAD—FAST JOINT.

Size.	per doz. prs.	Size.	per doz. prs.	Size.	per doz. prs.
1 $\frac{1}{2}$ by 2.	- - \$0 90	3 $\frac{1}{2}$ by 4 $\frac{1}{2}$ .	- - \$2 80	4 $\frac{1}{2}$ by 4 $\frac{1}{2}$ ,	- - \$3 77
1 $\frac{1}{2}$ by 2 $\frac{1}{2}$ .	- - 1 00	3 $\frac{1}{2}$ by 5.	- - 3 00	4 $\frac{1}{2}$ by 5,	- - 4 00
2 by 2.	- - 70	3 $\frac{1}{2}$ by 5 $\frac{1}{2}$ .	- - 3 35	5 by 3,	- - 2 80
2 by 2 $\frac{1}{2}$ .	- - 90	3 $\frac{1}{2}$ by 6,	- - 4 30	5 by 5,	- - 5 33
2 by 3.	- - 1 00	3 $\frac{1}{2}$ by 6 $\frac{1}{2}$ .	- - 4 70	5 by 5 $\frac{1}{2}$ ,	- - 5 75
2 $\frac{1}{2}$ by 2,	- - 90	3 $\frac{1}{2}$ by 7,	- - 5 20	5 by 6,	- - 6 70
2 $\frac{1}{2}$ by 2 $\frac{1}{2}$ .	- - 1 00	4 by 3.	- - 2 12	5 by 6 $\frac{1}{2}$ ,	- - 7 00
2 $\frac{1}{2}$ by 3.	- - 1 24	4 by 3 $\frac{1}{2}$ ,	- - 2 25	5 by 7 $\frac{1}{2}$ ,	- - 10 00
3 by 2 $\frac{1}{2}$ ,	- - 1 24	4 by 4.	- - 2 67	5 $\frac{1}{2}$ by 5 $\frac{1}{2}$ ,	- - 6 25
3 by 3.	- - 1 56	4 by 4 $\frac{1}{2}$ ,	- - 3 22	5 $\frac{1}{2}$ by 6,	- - 7 40
3 by 3 $\frac{1}{2}$ .	- - 1 90	4 by 5.	- - 3 77	5 $\frac{1}{2}$ by 6 $\frac{1}{2}$ ,	- - 8 00
3 by 4,	- - 2 12	4 by 5 $\frac{1}{2}$ ,	- - 4 60	6 by 4,	- - 6 62
3 $\frac{1}{2}$ by 3.	- - 1 90	4 by 6,	- - 6 00	6 by 6,	- - 8 00
3 $\frac{1}{2}$ by 3 $\frac{1}{2}$ .	- - 2 12	4 $\frac{1}{2}$ by 3,	- - 2 60	6 by 8,	- - 12 00
3 $\frac{1}{2}$ by 4.	- - 2 25	4 $\frac{1}{2}$ by 4,	- - 3 22	6 by 10,	- - 15 00

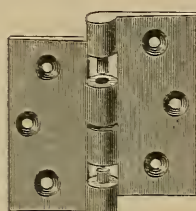
# LOOSE JOINT CAST BUTTS.

PACKED IN PAPER BOXES.

COMMON PATTERN.



GREENWOOD'S PATENT.

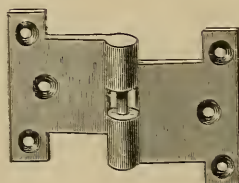


List the same for both sorts.

## NARROW AND BROAD.

Size.		per doz. prs.	Size.		per doz. prs.
2 inch. NARROW.	- - -	\$0 70	3½ by 3½. BROAD.	- - -	\$2 34
2½ " " " "	- - -	92	3½ by 4. " " " "	- - -	2 48
2 by 2. BROAD.	- - -	92	4 by 3½. " " " "	- - -	2 48
2¼ by 2¼. " " " "	- - -	1 05	4 by 4. " " " "	- - -	2 90
2½ by 2. " " " "	- - -	1 12	4 by 4½. " " " "	- - -	3 45
2½ by 2½. " " " "	- - -	1 22	4 by 5. " " " "	- - -	4 25
3 by 2½. " " " "	- - -	1 34	4 by 6. " " " "	- - -	5 50
3 by 3. " " " "	- - -	1 78	4½ by 4½. " " " "	- - -	4 00
3 by 3½. " " " "	- - -	2 12	5 by 5. " " " "	- - -	5 56
3 by 4. " " " "	- - -	2 34	5 by 5½. " " " "	- - -	6 00
3½ by 3. " " " "	- - -	2 12	6 by 6. " " " "	- - -	7 00

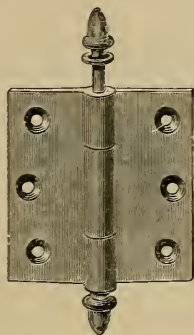
## CONGRESS BUTTS.



Nos.		per doz. prs.	Nos.		per doz. prs.
200. 3½ inches when open.	- - -	\$1 42	205A. 5¾ inches when open.	- - -	\$2 20
201. 3¾ " " " "	- - -	1 58	205B. 6 " " " "	- - -	2 33
202. 3½ " " " "	- - -	1 90	205C. 6¼ " " " "	- - -	2 60
203. 4½ " " " "	- - -	1 95	205D. 7½ " " " "	- - -	3 60
204. 5 " " " "	- - -	2 00	205E. 7½ " " " "	- - -	4 90
205. 5½ " " " "	- - -	2 10			

# ORNAMENTAL BUTT HINGES.

## LOOSE PIN ACORN BUTTS.



REVERSIBLE — RIGHT OR LEFT.

Joints milled to a perfect fit. Holes drilled and warranted true.

### NOT JAPANNED.

### JAPANNED.

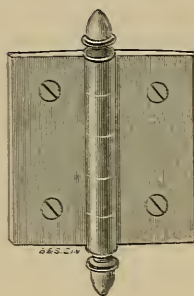
### JAPANNED,

with Silver-Plated Acorns.

<i>Size.</i>	<i>per doz.</i>	<i>Size.</i>	<i>per doz.</i>	<i>Size.</i>	<i>per doz.</i>
2½ by 2½, - -	\$1 34	2½ by 2½, - -	\$2 00	3 by 2½, - -	\$7 10
3 by 2½, - -	1 48	3 by 2½, - -	2 20	3 by 3, - -	7 25
3 by 3, - -	1 78	3 by 3, - -	2 50	3 by 3½, - -	7 50
3 by 3½, - -	2 12	3 by 3½, - -	2 85	3½ by 3, - -	7 50
3½ by 3, - -	2 12	3½ by 3, - -	2 85	3½ by 3½, - -	7 75
3½ by 3½, - -	2 34	3½ by 3½, - -	3 10	3½ by 4, - -	8 00
3½ by 4, - -	2 48	3½ by 4, - -	3 40	4 by 3½, - -	8 00
4 by 3½, - -	2 48	4 by 3½, - -	3 40	4 by 4, - -	8 50
4 by 4, - -	2 98	4 by 4, - -	3 80	4 by 4½, - -	9 00
4 by 4½, - -	3 45	4 by 4½, - -	4 50	4½ by 4½, - -	9 50
4½ by 4½, - -	4 00	4½ by 4½, - -	5 00	4½ by 5, - -	10 00
4½ by 5, - -	4 25	4½ by 5, - -	5 50	5 by 5, - -	11 00
5 by 5, - -	5 56	5 by 5, - -	6 50	5 by 5½, - -	11 50
5 by 5½, - -	6 00	5 by 5½, - -	7 00	5½ by 5½, - -	12 00
5½ by 5½, - -	6 50	5½ by 5½, - -	7 50	5½ by 6, - -	12 50
5½ by 6, - -	6 75	5½ by 6, - -	7 75	6 by 6, - -	13 00
6 by 6, - -	7 00	6 by 6, - -	8 50		

# ORNAMENTAL BUTT HINGES.

## HEAVY BRASS AND PLATED HINGES.



With Caps covering the Screw Holes,  
Steel Bushed, Acorn Tips.

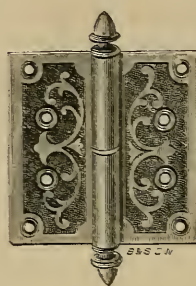
### FAST JOINTS.

Size.		Brass.	Plated.
2 by 2.	- per pair.	\$3 60	\$6 00
2 by 2½.	- - "	3 90	6 60
2½ by 2½.	- - "	4 20	7 20
2½ by 3.	- - "	4 50	7 80
3 by 3.	- - "	4 80	8 40
3 by 3½.	- - "	5 10	9 00
3½ by 3½.	- - "	5 40	9 60
3½ by 4.	- - "	5 70	10 20
3½ by 5.	- - "	6 30	11 40
3½ by 6.	- - "	6 90	12 60
3½ by 7.	- - "	7 50	13 80
4 by 4.	- - "	6 00	10 80
4 by 4½.	- - "	6 30	11 40
4½ by 4½.	- - "	6 60	12 00
4½ by 5.	- - "	6 90	12 60
4½ by 6.	- - "	7 50	13 80
5 by 5.	- - "	7 20	13 20
5 by 5½.	- - "	7 50	13 80
5½ by 5½.	- - "	7 80	14 40

Order in advance of your wants, as they are not usually kept in stock. Other sizes furnished.

There are eight steel bushes in each Hinge, not two, as they are frequently made.

## ORNAMENTED BRASS & IRON HINGES.



With Steel Washers and Silver Plated  
Acorn Tips.

Size.		Loose Jts.	Fast Jts.
		Iron.	Brass.
3 by 3.	- per pair,	\$1 35	\$4 80
3 by 4.	- - "	1 65	5 40
3 by 5.	- - "	1 95	6 00
4 by 4.	- - "	2 10	6 00
4 by 4½.	- - "	2 25	6 30
4 by 5.	- - "	2 40	6 60
4 by 6.	- - "	2 70	7 20
5 by 5.	- - "	3 10	7 80
5 by 6.	- - "	3 40	7 04
5 by 6½.	- - "	3 60	8 10
5 by 7.	- - "	3 75	8 00
5 by 8.	- - "	4 25	9 00
5 by 8½.	- - "	4 50	9 30
6 by 8.	- - "	5 50	12 00

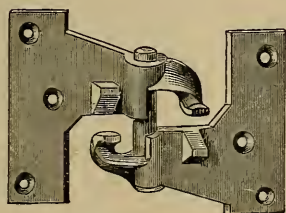
With Bronzed Acorns to order, instead of Silver Plated.

### BRONZED SCREWS.

For 3 in. sizes.	per gross.	- -	\$0 80
" 4 "	" "	-	1 00
" 5 "	" "	- -	1 10



## LULL & PORTER'S PATENT SELF-LOCKING SHUTTER HINGES.



**Complete with Inside Fasteners. Require no Outside Fasteners.**

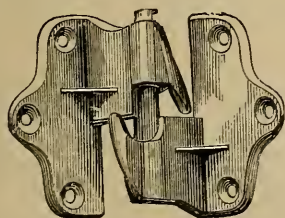
We give the "reveal," or projection, which each size will swing clear of.

No. 3,	$3\frac{1}{8}$ inch,	for Frame Buildings, with no "reveal,"	per dozen pairs,	\$2 10
" 2,	$4\frac{1}{4}$ "	" " Frame or small Brick Buildings, with $1\frac{1}{2}$ inch "reveal,"	2 60	
" $1\frac{1}{2}$ ,	5 "	" " Brick Buildings, with 2 inch "reveal,"	per dozen pairs,	2 80
" 1,	$5\frac{1}{2}$ "	" " " " " $2\frac{1}{2}$ " " " " "	3 00	
" 0,	$6\frac{1}{4}$ "	" " " " " 3 " " " " "	3 50	
" 00,	$8\frac{3}{4}$ "	" " " " " $4\frac{1}{2}$ " " " " "	5 00	

These sizes require to be mortised in like common Butt Hinges.

## LULL & PORTER'S SURFACE HINGES.

We make the leading sizes to screw on the surface of Shutter and Frame, requiring no cutting whatever. They fully answer the purposes of the above, and are much easier set.



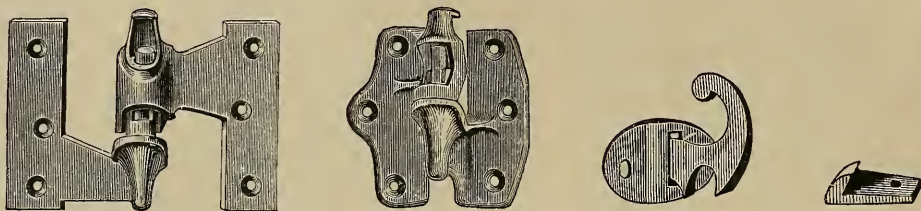
No. 4,	$3\frac{1}{8}$ inch,	(same size as No. 3,) for Frame,	per dozen pairs,	- - \$2 10
" 5,	$4\frac{1}{2}$ "	(between $1\frac{1}{2}$ and 2,) for Brick,	" " "	- 2 80

We have also three sizes of Surface Hinges, VERY LIGHT, which we sell at prices to compete with various cheap patterns, but guaranteed to answer a better purpose.

No. $3\frac{1}{2}$ ,	size of No. 3,	for Frame Buildings,	per dozen pairs,	- - - \$1 50
" $4\frac{1}{2}$ ,	" " 2,	for Brick " " "	- - - 1 75	
" $5\frac{1}{2}$ ,	" " 1,	for " " " "	- - - 2 10	

# UNION SHUTTER HINGES.

JAMES L. HAVEN & COMPANY'S PATENT.



Complete with Inside Fasteners. Require no Outside Fasteners.

We give the "reveal," or projection, which each size will swing clear of:

2½ inch,	for Steamboat Shutters,	-	-	-	-	-	per dozen pairs,	\$1 60
3⅛ "	"	Frame Buildings, with no "reveal,"	-	-	-	"	"	2 10
4¼ "	"	Frame or small Brick Buildings,	1½ in.	"reveal,"	"	"	"	2 60
5 "	"	Brick Houses,	2 "	"	"	"	"	2 80
5½ "	"	"	"	"	"	"	"	3 00
6½ "	"	"	"	"	"	"	"	3 50
8½ "	"	"	"	"	"	"	"	5 00
9½ "	"	"	"	"	"	"	"	6 00

These sizes require to be mortised.

No. 3⅛	Surface, same size as 3½ inch,	per dozen pairs.	-	-	-	-	\$2 10
" 4¼	"	" 4¼ "	"	"	-	-	2 60
" 5	"	" 5 "	"	"	-	-	2 80
" 5½	"	" 5½ "	"	"	-	-	3 00

These four leading sizes screw on the surface of the Shutter and Frame, requiring no cutting whatever.

They are easier set than the pattern "to mortise," and answer perfectly.

Both sorts, now extensively in use, sustain the Shutters firmly open without the aid of any outside Fasteners, by means of the peculiar formation of the Hinge and the weight of the Blind; no wind will close or make them rattle, yet a very gentle direct pull will close them.

They are very neat in appearance; no more conspicuous than the common Parliament or Congress Butts.

Select a size sufficiently large to allow the outer edge of the Shutter, when open, to lean against the wall, leaving a space at the Hinge end of one or two inches between the Shutter and wall.

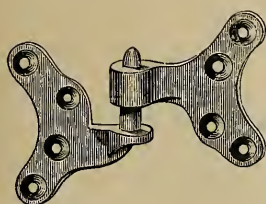
The 2½ inch, for Steamboat Shutters, are cheaper than common Loose Joints, because they require no outside Fasteners and NO REPAIRS.

WE WARRANT THEM SATISFACTORY IN ALL CASES.

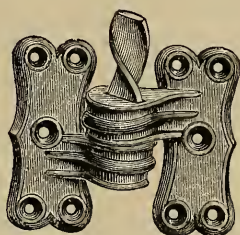
*A working model sent, if requested, free of charge.*



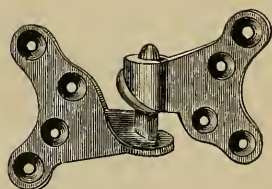
# GATE HINGES.



PLAIN.



"AUGER."

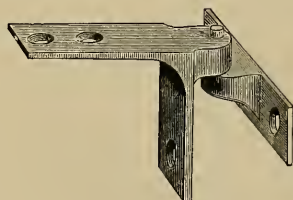
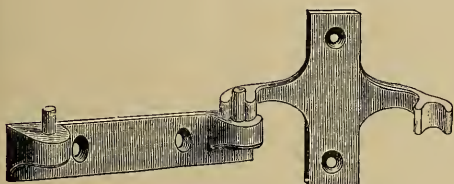


SELF-CLOSING.

PACKED ONE DOZEN PAIRS IN A WOODEN BOX.

	Nos. 1	2
Plain, - - - - -	\$3 00	\$4 95 per dozen pairs.
Self-Closing, - - - - -	3 75	5 60 " "
" "Auger," - - - - -	6 00	8 00 " "

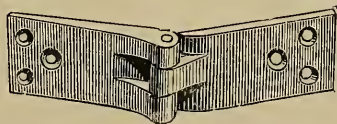
# SALOON DOOR HINGES.



To swing both ways.

Per set, for one door, - - - - -	\$0 35
" " " wrought and japanned, - - - - -	50

# COACH AND CARRIAGE DOOR HINGES.



Malleable. Drilled and Riveted.

## CARRIAGE HINGES.

1½	1¾	2	2¼	2½	3 inch.
\$1 25	1 37	1 60	2 00	2 30	2 75 per dozen.

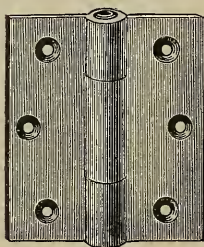
## COACH HINGES.

2¼	3	3½	4 inch.
\$2 25	3 75	5 00	6 00 per dozen.

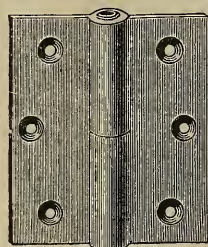
# WROUGHT BUTTS.

PACKED IN PAPER BOXES.

FAST JOINT.



LOOSE JOINT.



## NARROW BUTTS.

RIVETED PIN.

1	inch, per dozen pairs,	-	-	-	-	-	-	\$0 32
1 $\frac{1}{4}$	"	"	"	-	-	-	-	36
1 $\frac{1}{2}$	"	"	"	-	-	-	-	43
1 $\frac{3}{4}$	"	"	"	-	-	-	-	50
2	"	"	"	-	-	-	-	60
2 $\frac{1}{2}$	"	"	"	-	-	-	-	72
3	"	"	"	-	-	-	-	90
3 $\frac{1}{2}$	"	"	"	-	-	-	-	1 44
4	"	"	"	-	-	-	-	1 92
4 $\frac{1}{2}$	"	"	"	-	-	-	-	2 70
5	"	"	"	-	-	-	-	3 30

## BROAD BUTTS.

RIVETED.

2	by 2 inches, per dozen pairs,	\$0 78
2	by 2 $\frac{1}{2}$ " " "	93
2 $\frac{1}{2}$	by 2 $\frac{1}{2}$ " " "	1 08
2 $\frac{1}{2}$	by 3 " " "	1 20
3	by 2 $\frac{1}{2}$ " " "	1 35
3	by 3 " " "	1 44
3	by 3 $\frac{1}{2}$ " " "	1 90
3 $\frac{1}{2}$	by 3 " " "	1 90
3 $\frac{1}{2}$	by 3 $\frac{1}{2}$ " " "	2 16
3 $\frac{1}{2}$	by 4 " " "	2 75
4	by 3 $\frac{1}{2}$ " " "	2 75
4	by 4 " " "	3 12
4	by 4 $\frac{1}{2}$ " " "	3 60
4	by 5 " " "	4 00
4	by 6 " " "	4 80
4 $\frac{1}{2}$	by 4 $\frac{1}{2}$ " " "	4 20
5	by 5 " " "	5 40

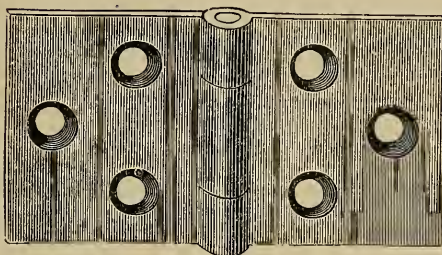
LOOSE JOINT.

2	by 2 inches, per dozen pairs,	\$1 10
2	by 2 $\frac{1}{2}$ " " "	1 20
2 $\frac{1}{2}$	by 2 " " "	1 20
2 $\frac{1}{2}$	by 2 $\frac{1}{2}$ " " "	1 32
2 $\frac{1}{2}$	by 3 " " "	1 56
3	by 2 $\frac{1}{2}$ " " "	1 68
3	by 3 " " "	1 86
3	by 3 $\frac{1}{2}$ " " "	2 40
3 $\frac{1}{2}$	by 3 " " "	2 40
3 $\frac{1}{2}$	by 3 $\frac{1}{2}$ " " "	2 70
3 $\frac{1}{2}$	by 4 " " "	3 00
4	by 4 " " "	3 30
4	by 4 $\frac{1}{2}$ " " "	3 70
4	by 5 " " "	4 00
4	by 6 " " "	5 50
4 $\frac{1}{2}$	by 4 $\frac{1}{2}$ " " "	4 25
5	by 5 " " "	5 50

# WROUGHT BUTTS.

PACKED IN PAPER BOXES.

## BACK FLAPS.

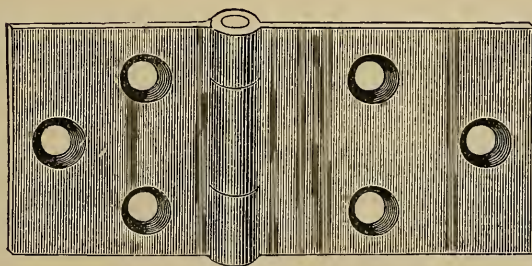


$\frac{3}{4}$	inch, per dozen pair,	-	-	\$o	45
$\frac{7}{8}$	"	"	"	-	47
1	"	"	"	-	50
$1\frac{1}{8}$	"	"	"	-	55
$1\frac{1}{4}$	"	"	"	-	60
$1\frac{3}{8}$	"	"	"	-	65
$1\frac{1}{2}$	"	"	"	-	70
$1\frac{5}{8}$	"	"	"	-	75
$1\frac{3}{4}$	"	"	"	-	80
2	"	"	"	-	90

## SQUARE BACK FLAPS.

$\frac{7}{8}$	inch, per dozen pair,	-	-	\$o	43
1	"	"	"	-	45
$1\frac{1}{8}$	"	"	"	-	50
$1\frac{1}{4}$	"	"	"	-	55
$1\frac{3}{8}$	"	"	"	-	60
$1\frac{1}{2}$	"	"	"	-	65
$1\frac{3}{4}$	"	"	"	-	75
2	"	"	"	-	85

## TABLE HINGES.

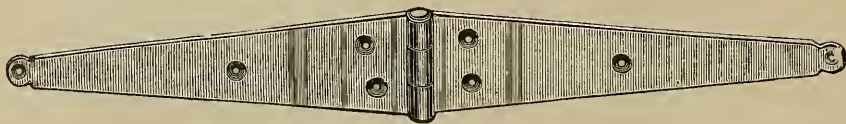


$\frac{3}{4}$	inch, per dozen pair,	-	-	\$o	40
$\frac{7}{8}$	"	"	"	-	43
1	"	"	"	-	45
$1\frac{1}{8}$	"	"	"	-	50
$1\frac{1}{4}$	"	"	"	-	55

$1\frac{3}{8}$	inch, per dozen pair,	-	-	\$o	60
$1\frac{1}{2}$	"	"	"	-	65
$1\frac{5}{8}$	"	"	"	-	70
$1\frac{3}{4}$	"	"	"	-	75
2	"	"	"	-	85

# WROUGHT STRAP AND T HINGES.

## STRAP HINGES.



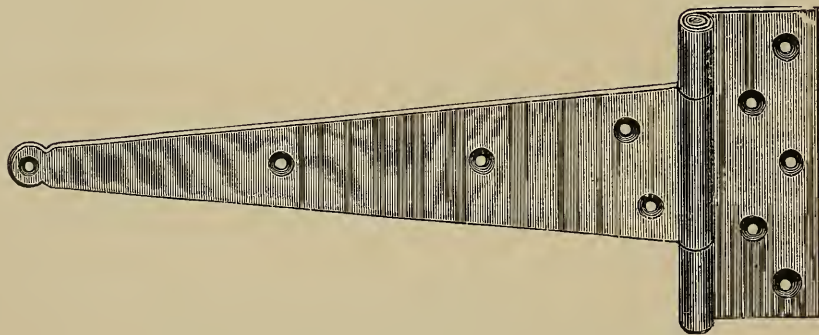
### LIGHT.

3	4	5	6	7	8	10	12	14	inch.
\$0 75	90	1 10	1 35	1 75	2 00	2 75	4 50	5 75	per doz. pairs.

### HEAVY.

4	5 inch.	6	8	10	12	14	16 inch.
\$1 10	1 50 per doz. pairs.	12	12	11	10	10	10 cents per pound.

## T HINGES.



### LIGHT.

3	4	5	6	8	10	12 inch.
\$0 75	85	1 00	1 20	1 50	1 90	2 80 per doz. pairs.

### HEAVY.

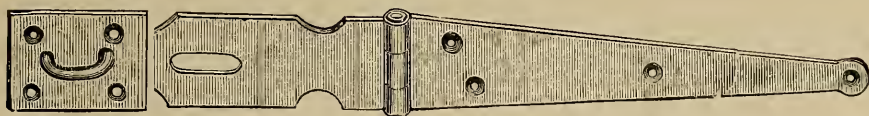
6	8	10	12	14 inch.
\$1 30	1 80	2 60	4 00	5 00 per doz. pairs.

### EXTRA HEAVY.

6	8	10	12	14	16 inch.
12	12	11	10	10	10 cents per pound.

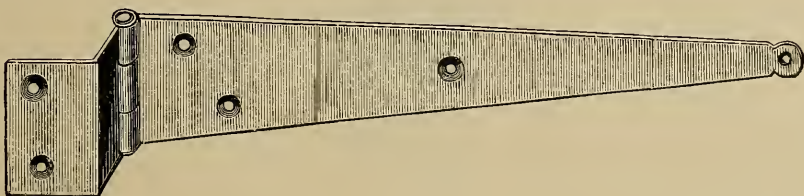


## HINGE HASPS.



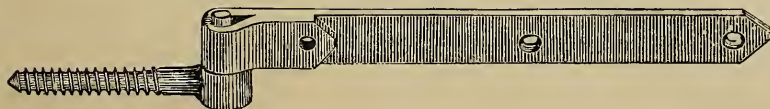
3	4½	6	8	10 inch.
\$1 75	2 00	2 25	3 50	4 75 per dozen pairs.

## CHEST HINGES.



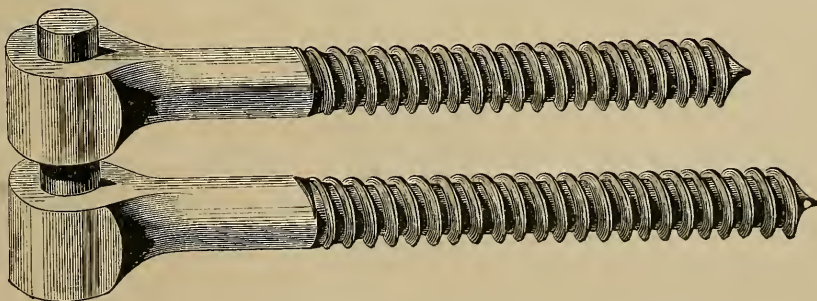
6	8	10 inch.
\$1 25	1 50	2 00 per dozen.

## SCREW AND STRAP HINGES.



8, 10 and 12 inches,	- - - - -	per pound, 10 cents.
14 to 36 inches,	- - - - -	" 9 "

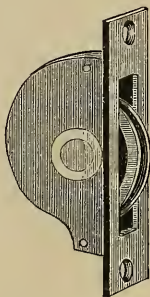
## WROUGHT SCREW HOOK AND EYE HINGES.



½ by 4½	¾ by 5	¾ by 6½	¾ by 7	1 by 8 inch.
15½	13½	12½	12½	12½ cents per pound.

# AXLE PULLEYS.

No. 1. BEST QUALITY, "NOISELESS."



Axles and Wheels turned.

1½	1¾	2	2¼	2½	3	3½ inch.
\$1 00	1 25	1 45	2 10	2 50	3 38	5 20 per dozen.

## BRASS AXLE PULLEYS.

Brass Front and Pulley. Wrought Iron Case.

2	2¼ inch.
\$10 50	12 00 per dozen.

No. 2. BLAKE'S PATTER.

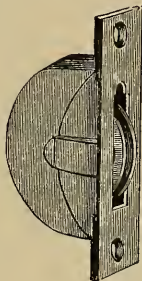


1¾	2	2¼	2½ inch.
\$0 60	65	1 00	1 40 per dozen.

# AXLE PULLEYS—DOOR BUTTONS.

## No. 4. CAPPED AXLE SASH PULLEYS.

PATENTED SEPT. 17, 1867.



We offer the trade a new style of Axle Pulley, which we guarantee preferable to the No. 2, and at same prices. The axle can never rub, so as to bind and run hard.

1¾  
\$0 60

2  
65

2¼  
1 00

2½ inch.  
1 40 per dozen.

## No. 3. WIRE AXLE SASH PULLEYS.

1½  
37

1¾  
40

2 inch.  
45 cents per dozen.

## DOOR BUTTONS.



FLAT.

1½ 1¾ 2 inch.  
\$0 75 85 95 per gross.



RAISED.

1½ 1¾ 2 inch.  
\$0 60 85 1 10 per gross.



ON PLATES.

1½ inch.  
\$1 90 per gross.

# CAST DOOR BOLTS.

## STEEL SPRING SQUARE BOLTS.



WITH BRASS KNOBS.

3	4	5 inch.
\$0 65	75	1 00 per dozen.



ALL IRON.

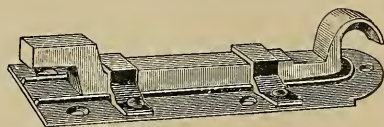
6	8	10	12 inch.
\$1 12½	1 87½	2 62½	3 37½ per doz.

## NECKED SQUARE SPRING BOLTS.



WITH BRASS KNOBS.

4	5 inch.
\$0 75	1 00 per dozen.



ALL IRON.

6	7	9 inch.
\$1 50	1 75	2 50 per dozen.

## BRASS KNOB BARREL BOLTS.



4
\$0 87½

5
1 12½

6 inch.
1 37½ per dozen.

## TOWER BOLTS—all Iron.



4
\$0 62½

5
87½

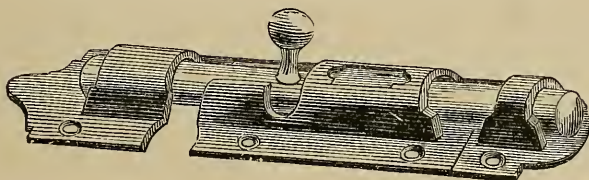
6
1 12½

7 inch.
1 37½ per dozen.

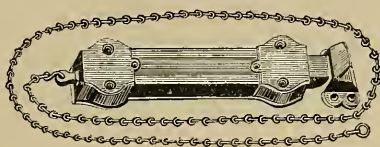


## CAST DOOR BOLTS.

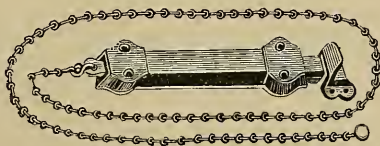
COTTAGE BOLTS— all Iron.

4  
\$0 805  
1 056 inch.  
1 40 per dozen.

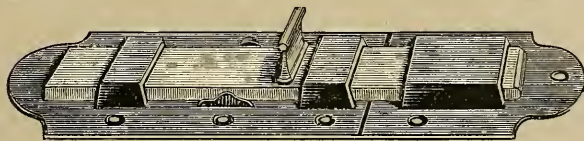
No. 1. CHAIN BOLTS— Heavy, Full Cased.

3  
\$2 504  
3 006  
4 008  
5 0010 inch.  
7 00 per dozen.

No. 2. CHAIN BOLTS— Common Pattern.

4  
\$1 87½6  
2 758  
3 5010 inch.  
4 50 per dozen.

BRASS KNOB SHUTTER BOLTS.

6  
\$1 258  
1 7510  
2 5012 inch.  
3 00 per dozen.

CHAMBER BOLTS, with Brass Knobs.



5 inch, per dozen,

\$0 75

# WROUGHT BOLTS—STAPLES.

## BRASS AND WROUGHT IRON FLUSH BOLTS.



No. 2. HEAVY BRASS— $\frac{3}{4}$  Inch Face.

9	12	18	24	30	36	40 inch.
\$11 25	12 38	14 63	16 88	20 82	24 75	28 13 per dozen.

No. 3. EXTRA HEAVY BRASS—1 Inch Face.

9	18	24	30	36 inch.
\$4 00	18 00	22 50	26 50	30 38 per dozen.

No. 4. HEAVY WROUGHT IRON— $1\frac{1}{8}$  Inch Face.

10	24	30	36	48	60	72 inch.
\$7 88	11 25	12 38	13 50	14 63	16 88	20 25 per dozen.

## No. 3. HEAVY WROUGHT IRON SPRING BOLTS.



10	12	18	24	30	36	48	60	72 inch.
\$7 88	9 00	10 12	11 25	12 38	13 50	14 63	16 88	20 25 per dozen.

## STAPLES FOR SQUARE BOLTS.



JAMB STAPLES.



FLOOR STAPLES.

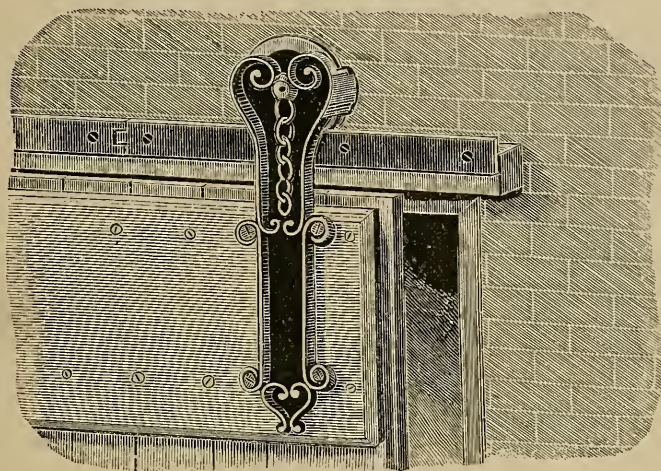
### JAMB STAPLES.

Nos. 0	1	2	3	4	5
For 3 in.	4 in.	5 in.	6 in.	8 and 10 in.	12 in. Bolts.
20	20	25	30	35	45 cents per dozen.

### FLOOR STAPLES.

No. 1, for 6, 7, 8 and 9 inch Bolts,	-	-	-	-	20 cents per dozen.
" 2, for 10, 11 and 12 "	"	"	-	-	30 " "

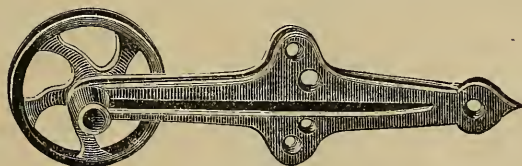
# HAVEN'S PATENT BARN DOOR ROLLERS, SQUARE GROOVE.



For Top or Bottom of Doors.

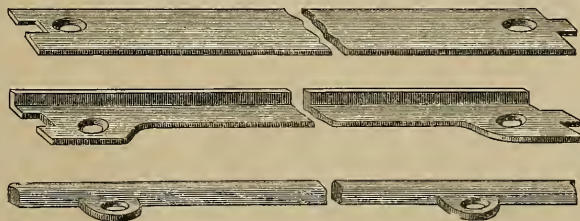
3	4	5	6 inch.
\$0 65	95	1 30	1 62 per pair.

## No. 2. BARN DOOR ROLLERS, ROUND GROOVE.



3	4	5	6 inch.
44	55	68	85 cents per pair.

## RAIL, FOR BARN DOOR ROLLERS.



Cast in 24 inch lengths.

Flat.	Angle.	Half Round, (for No. 2.)
7	8	7 cents per foot.

# BRACKETS.

## WALL AND CORNER BRACKETS.



POLISHED EDGES.

Bronzed in imitation of Black Walnut.

### WALL BRACKETS.

No. 40, Single Shelf,	4	by 9 inches,	per dozen,	-	-	-	-	\$7 00
" 60, " "	4½	by 11½	" "	-	-	-	-	9 00
" 80, Double "	4½	by 11½	" "	-	-	-	-	18 00

### CORNER BRACKETS.

No. 30, Single Shelf,	per dozen,	-	-	-	-	-	-	-	\$7 00
" 50, " "	" "	-	-	-	-	-	-	-	9 00
" 70, Double "	" "	-	-	-	-	-	-	-	18 00

### SHELF BRACKETS.



POLISHED EDGES.

Bronzed in imitation of Black Walnut.

Nos.	1	1½	2	3	3½	4	5	6
Size,	4x5	5½x7	6x8	7x9	8x10	9x11	10x12	12x15 inches.
	\$3 50	5 00	6 00	7 00	9 00	10 00	13 00	18 00 per dozen pairs.

Observe, each number makes two sizes; for instance, No. 6 will answer for either twelve or fifteen inch shelf.

Packed in pairs, with Screws to match in color, without extra charge.



## SHELF BRACKETS.

## JAPANNED AND BRONZED SHELF BRACKETS.

Japanned Black or Bronzed Solid Gold Color.

Nos. 11 and 12



No. 13



Nos. 14 and 15



No. 16



No. 17



No. 18



Nos. 11

12

13

14

15

Size,  $4\frac{1}{4} \times 6$  $5\frac{1}{2} \times 8$  $6 \times 5\frac{3}{4}$  $8 \times 8\frac{3}{4}$ 

10x11 inches.

Japanned, \$1 30

2 00

2 50

5 80

9 10 per dozen pairs.

Bronzed, 3 30

4 00

4 50

8 00

12 00 " "

Nos. 16

17

18

19

Size, 12x14

 $10\frac{1}{4} \times 13\frac{1}{2}$  $10\frac{1}{4} \times 13\frac{1}{2}$ 

16x21½ inches.

Japanned, \$13 00

18 70

20 00

36 00 per dozen pairs.

Bronzed, 18 00

24 00

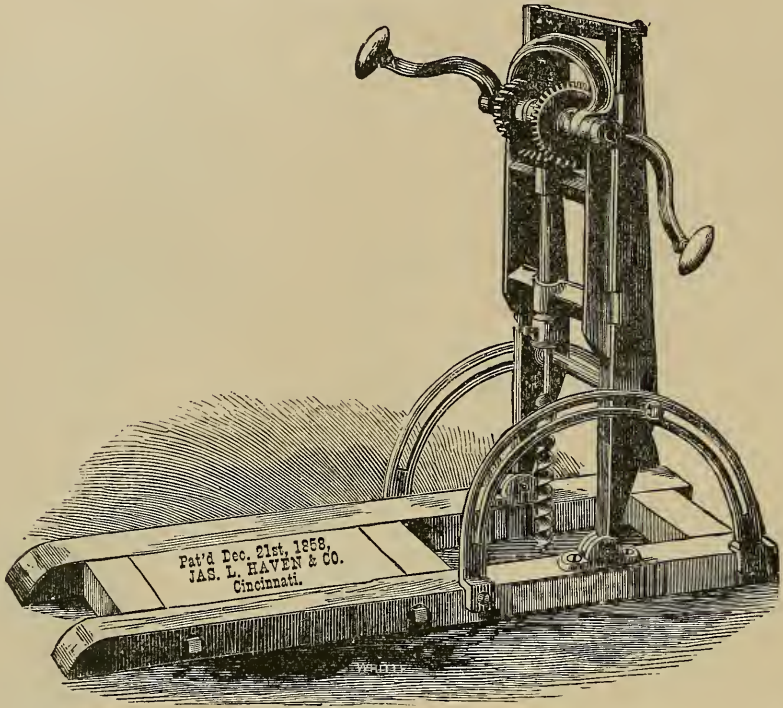
24 00

48 00 " "

The first figure represents the horizontal, the second the vertical side. 16x21½ will support a shelf from sixteen to eighteen inches wide, as the bracket need not reach to the extreme outer edge.

# CARPENTER'S BORING MACHINES.

## GRADUATED WAYS.



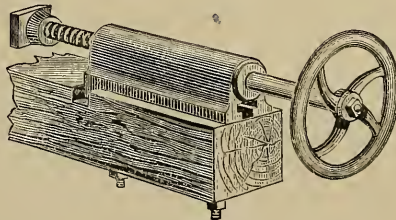
PLAIN, to bore only vertically,	- - - - -	each, \$4 75
ANGULAR, to bore at any angle (like cut),	- - - - -	" 6 25
AUGERS, usual quality, 18 quarters, 1, 1½ and 2 inch,	- - - - -	per set, 2 75
" Snell's, 18 quarter, 1, 1½ and 2 inch,	- - - - -	" 2 75

PACKED TWO, FOUR AND SIX IN A CASE.

When packed 2 in a case, add for case,	- - - - -	0 75
" " 4 " " " " " " " " " "	- - - - -	1 50
" " 6 " " " " " " " " " "	- - - - -	no charge for case.

The ways are graduated to quarter inches, so a carpenter can see at a glance how deeply the auger has entered the wood.

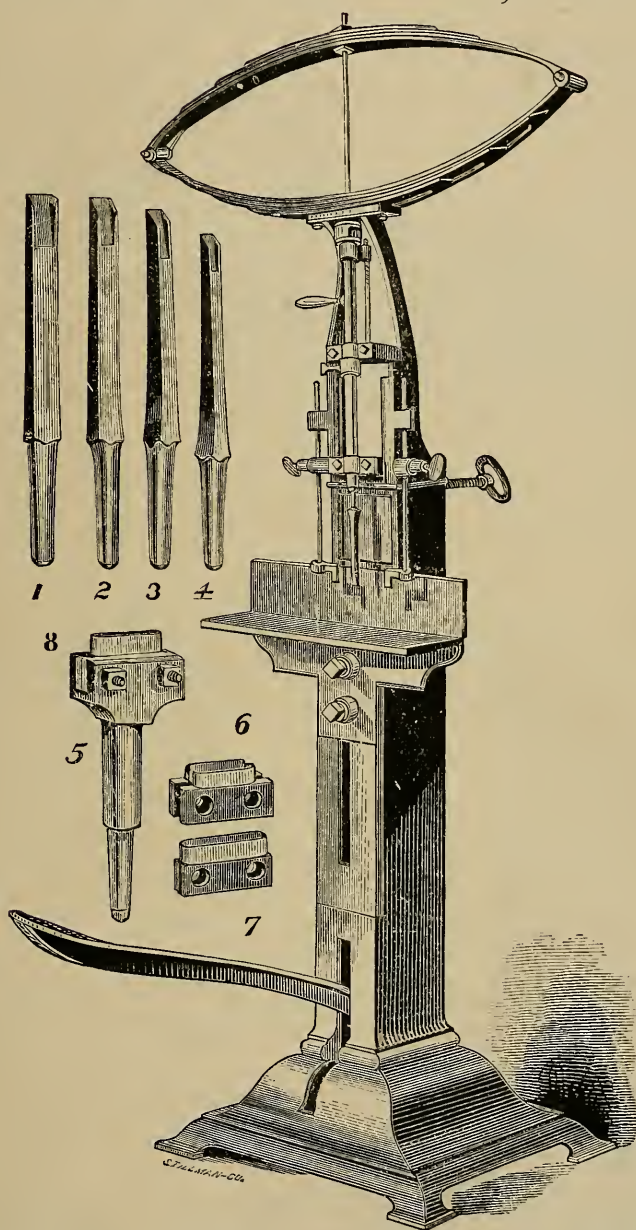
## CARPENTER'S CLAMP SCREWS.



With Crank or Wheels as ordered.

With Stirrup, for trestle, (not shown,) per pair.	- - - - -	\$5 00
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# STEPTOE'S MORTISING MACHINE.



Boxed, complete, (no charge for boxing,) with four Chisels — 5-16,  $\frac{3}{8}$ ,  $\frac{1}{2}$ ,  $\frac{5}{8}$  inch — and one stock for Blind Chisels, and 3 pairs of Bitts, - - - \$48 00

## EXTRA CHISELS, IF WANTED.

$\frac{1}{4}$  to  $\frac{1}{2}$  inch, \$1 50 each.  $\frac{5}{8}$  to  $\frac{3}{4}$  inch, \$1 75 each.  $\frac{7}{8}$  to 1 inch, \$2 00 each.

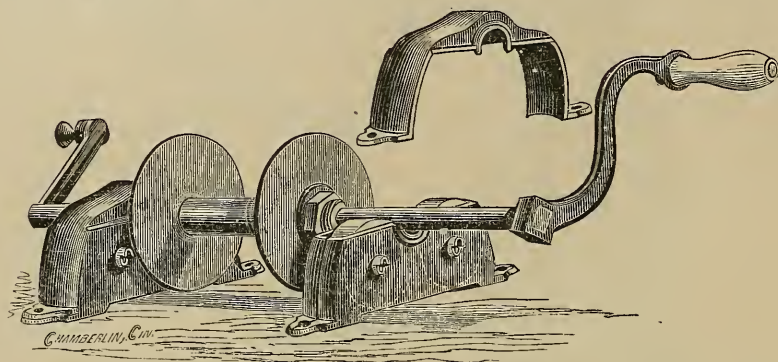
BLIND CHISELS, for hand or machine, 3 pairs of Bitts —  $1\frac{1}{4}$ ,  $1\frac{1}{2}$ ,  $1\frac{3}{4}$  inch, \$5 00

BLIND BITTS, fitted to old stock, per pair, - - - - - 1 25



# GRINDSTONE FIXTURES.

## HAVEN'S PATENT GRINDSTONE FIXTURES.



**WARRANTED PREFERABLE TO ANY OTHER STYLE IN USE.**

Order as we number them, *by the length of Shaft.*

Length of shaft, - -	15	17	19	22	25	30 inch.
Thickness of stone, -	3	3½	4½	5	5¼	5½ inch.
Price per dozen sets, \$	15 00	17 00	19 00	22 00	25 00	30 00

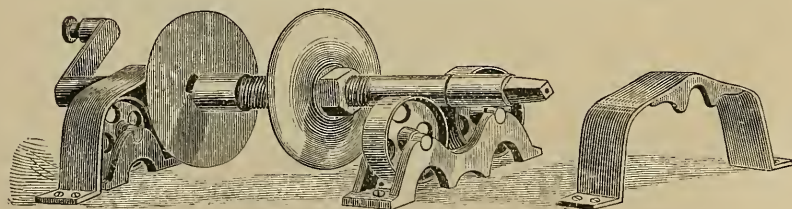
PACKED HALF DOZEN SETS IN A CASE.

**THE ROLLERS HAVE CHILLED BEARINGS,**

and are entirely enclosed in a case like an axle pulley, so that trouble by broken sets, caused by the loss of rollers, is impossible either in the hands of dealer or consumer; and when in use, they are thoroughly protected from water or grit. All japanned with our best japan, packed half dozen in a case, and a show card in each box.

A sample, mounted on a board, sent with the first order,  
**FREE OF CHARGE,** if requested.

## No. 3. GRINDSTONE FIXTURES.



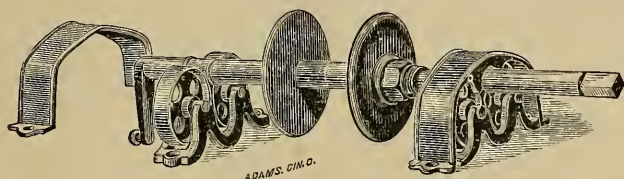
**Flanged, with Screw and Nut and Covers for the Rollers.**

19 inch Shafts, packed half dozen sets in a case, per dozen sets, - \$24 00



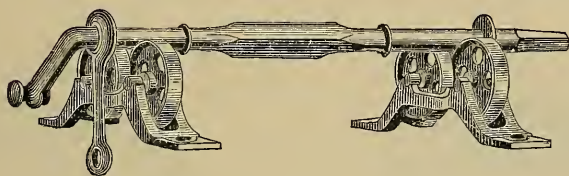
## GRINDSTONE FIXTURES.

## No. 6. GRINDSTONE FIXTURES.



17 inch Shafts, packed half dozen sets in a case, per dozen sets, - - \$16 00

## Nos. 4 and 5. GRINDSTONE FIXTURES.



## SQUARE SHAFTS.

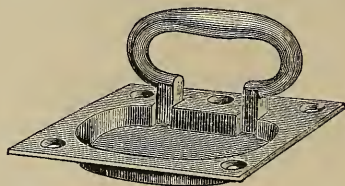
No. 4, 17 inch Shafts, packed 1 dozen sets in a case, per dozen sets, - \$9 00  
 " 5, 16 " " " " " " " " " " - - 7 00

## PRICES OF THE SEPARATE PARTS :

For the convenience of those requiring parts to replace those lost or sold, we give the prices for each piece separate, as a dozen sets of one part is seldom, if ever, ordered.

	Shafts, with Nuts	Shafts only.	Frames only.	Rollers only.	Flanges only.	Covers only.	Loops only.	Hand Cranks.
No. 3. each,	75c.	- -	11c.	10c.	10c.	18c.	- -	15c.
" 6, "	50c.	- -	9c.	7½c.	7½c.	12c.	- -	14c.
" 4, "	- -	35c.	7½c.	4c.	- -	- -	2c.	12½c.
" 5, "	- -	25c.	5c.	3c.	- -	- -	2c.	12½c.

## FLUSH CHEST HANDLES.



Nos. 1

\$1 75

2

2 25

3

5 00

4

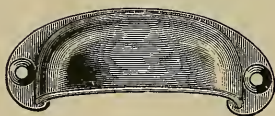
5 50 per dozen pairs.

## FLUSH RINGS.



Per dozen, - - - - - 72 cents.

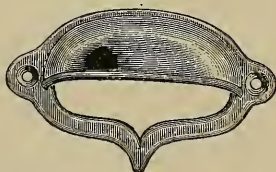
## DRAWER PULLS.



Nos. 1, 2, 4, 5.



Nos. 7, 8, 10, 11.

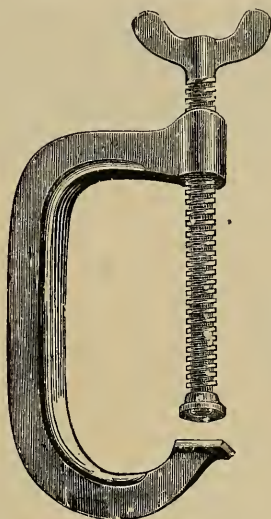


Nos. 735 and 736.

No.	1, 2½ inch,	Japanned,	-	-	-	-	-	-	per dozen,	18 cents.
"	2, 2½ "	Coppered,	-	-	-	-	-	-	"	20 "
"	4, 4 "	Japanned,	-	-	-	-	-	-	"	20 "
"	5, 4 "	Coppered,	-	-	-	-	-	-	"	22 "
"	7, 3 "	Japanned,	-	-	-	-	-	-	"	25 "
"	8, 3 "	Coppered,	-	-	-	-	-	-	"	30 "
"	10, 4½ "	Japanned,	-	-	-	-	-	-	"	35 "
"	11, 4½ "	Coppered,	-	-	-	-	-	-	"	40 "
"	101, 2½ "	Japanned,	-	-	-	-	-	-	"	18 "
"	102, 2½ "	Coppered,	-	-	-	-	-	-	"	20 "
"	735, Fancy Drawer Handle,	4¾ inch long,	-	-	-	-	-	-	"	25 "
"	736, " " " "	5¾ " " "	-	-	-	-	-	-	"	30 "

# WARNER'S HAND CLAMP SCREWS.

HIGHEST PRIZE MEDAL AWARDED AT PARIS IN 1867.



Greatly improved in strength, style and effectiveness; a rib being added to the side.

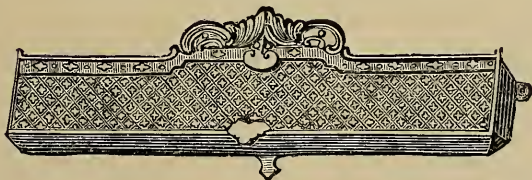
## IN BOXES OF ONE DOZEN EACH.

No. 00, opens 2 inches, per doz.	\$2 00
0, " 2½ " " "	3 00
1, " 3 " " "	4 00
2, " 4 " " "	6 00

## IN PACKAGES OF HALF DOZEN EACH.

No. 3, opens 5½ inches, per doz.	\$7 50
4, " 7 " " "	9 00
5, " 8 " " "	11 00
6, " 10 " " "	13 00

## PEW BOOK RACKS.



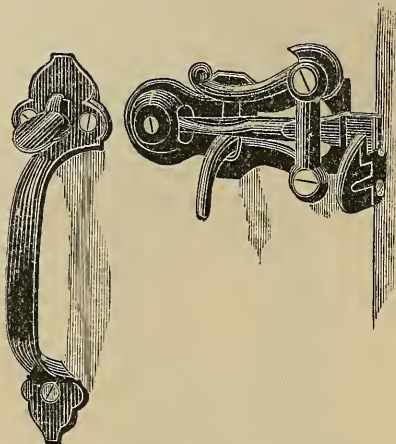
No. 1, bronzed, for church pews,	- - - - -	75 cents each.
" 2, " " " " " "	- - - - -	50 " "

## SASH ROLLERS.



No. 1, plate 2 by 1 inch, wheel ¾ inch diameter, ¾ inch thick, per gross,	\$3 00
" 3, " 1¾ by ¾ " " ⅝ " " ½ " " "	2 25
" 5, " 1¾ by 11-16 in. " ⅝ " " ⅝ " " "	2 00

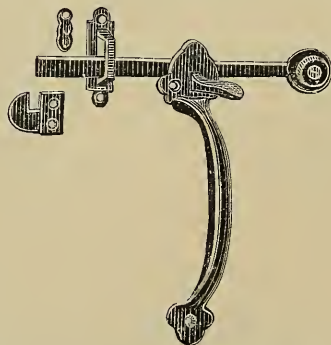
## ROGGINS' PATTERN THUMB LATCHES.



Papered singly. One dozen in a package. Twelve dozen in a case.

Per dozen, - - - - - 65 cents.

## BLAKE'S PATTERN THUMB LATCHES.



Nos. 0  
45

1  
55

2  
65

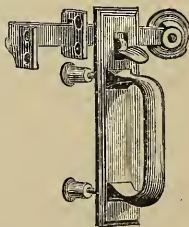
3  
75

4

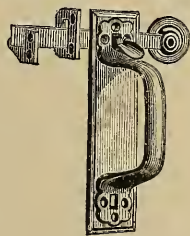
85 cents per dozen.

## STORE DOOR LATCHES—Oblique Handles.

For either Right or Left Hand Doors,  $1\frac{1}{4}$  to 3 Inches thick.



No. 6.



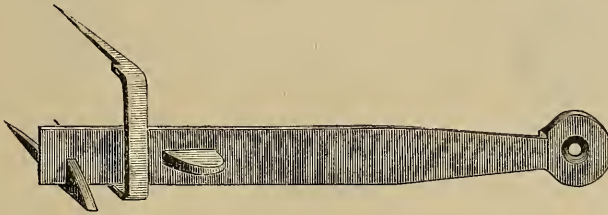
No. 16.

No. 6, with Plate, Bolt and Nuts,	-	-	-	-	-	per dozen, \$4 50
" 16, " " for Wood Screws,	-	-	-	-	-	" 3 12



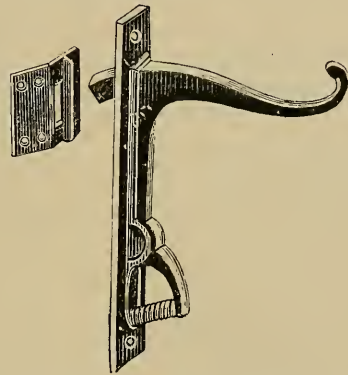
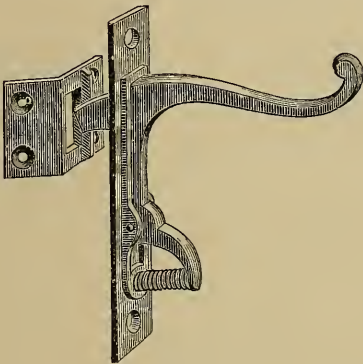
## WROUGHT GATE OR BARN DOOR LATCHES.

To open from inside, bore an auger hole under it and lift with the finger.



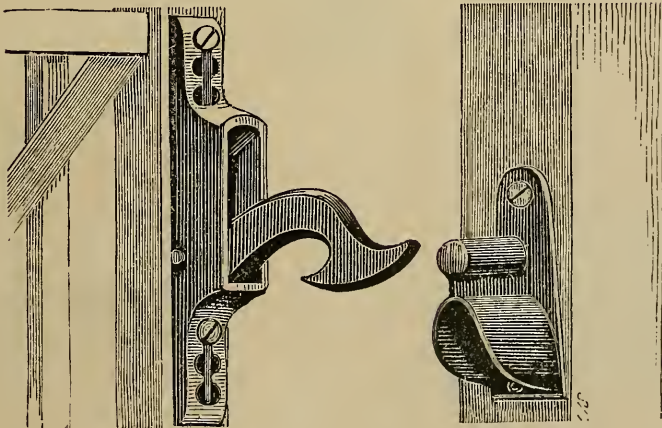
8	9	10	11	12 inch.
\$2 00	2 20	2 35	2 65	2 75 per dozen.

## MORTISE GATE LATCHES.



No. 1, riveted, per dozen, - \$1 00 | No. 2, not riveted, per dozen, - \$0 90

## SAINT LOUIS GATE LATCHES.



No. 1, per dozen, - - - \$1 75 | No. 2, very heavy, per dozen, \$3 50

# PULLEYS.

## SIDE PULLEYS.



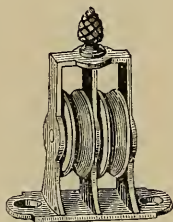
SINGLE.			DOUBLE.				
1½	2¼	3 inch.	½ inch.				
\$0 75	1 40	3 57 per dozen.	Per dozen,	-	-	-	\$1 65

## SCREW PULLEYS.



SCREW PULLEY.			ENCASED.		HALF CASED.		
1½	2¼	3 inch.	2¼ inch Wheel.		2¼ inch Wheel.		
\$0 70	1 40	1 95 per doz.	Per dozen,	- -	\$2 20	Per dozen,	- - \$1 65

## UPRIGHT FRAME PULLEYS.



SINGLE.			DOUBLE.	
1½	2¼	inch.	1½	2¼
\$0 75	1 40	per dozen.	\$1 65	3 30 per dozen.

## DUMB WAITER PULLEYS.

Very heavy and strong, for  $\frac{3}{4}$  inch rope, per dozen, - - - - \$7 50

## LAUNDRY PULLEYS.

Very heavy, per dozen, - - - - - \$3 50

## PLUMB BOBS.



IRON.

Nos. 1	2	3
\$0 95	1 40	2 25 per dozen.



LEAD.

Nos. 1	2	3
\$2 00	2 50	4 20 per dozen.

## SASH CORD IRONS.



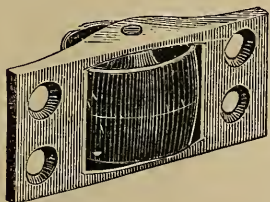
Per gross, - - - - - 50 cents.

## PORCH SUPPORTS.



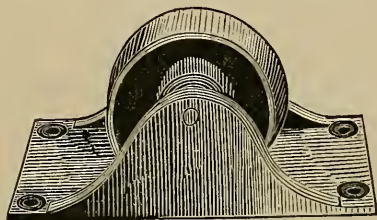
Japanned, per pair, for one post, - - - - - 16 cents.

## CHEST ROLLERS.



No. 1, Roller  $1\frac{1}{2}$  in. diam., pr doz., \$1 25  
 " 2, " 1 " " 60

## TRUCK ROLLERS.



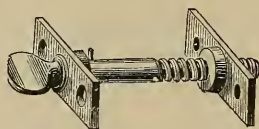
Heavy, for Store Boxes.

No. 3, Roller  $1\frac{3}{4}$  in. diam., pr doz., \$3 00



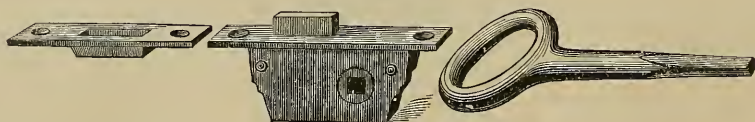
# STORE DOOR SHUTTER TRIMMINGS.

## SHUTTER SCREWS.



1¾	2	2¼	2½	3 inch.
67	72	75	80	85 cents per dozen.

## SHUTTER LOCKS.



Polished Faces, per dozen, (including 3 Keys),	-	-	-	-	-	\$3 00
Keys only, if ordered extra, per dozen,	-	-	-	-	-	50

The above is a new pattern (patented,) much preferable to old style.

The Bolt fits closely, preventing the entrance of dirt, and can not be pushed down from the outside.

## SHUTTER LIFTS.



No. 1. THREE HOLE.

Per gross, - - - - \$2 25



No. 2. FLUSH.

Per gross, - - - - \$3 50

## STUBS AND PLATES.



No. 1. SQUARE HOLE.

Per gross, - - - - \$2 00

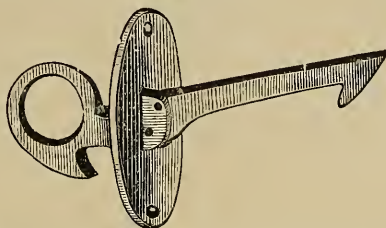


No. 2. ROUND HOLE.

Per gross, - - - - \$2 00

## SHUTTER FASTENERS.

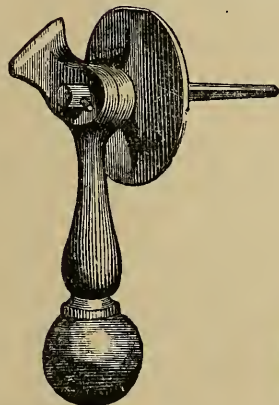
## MACKRELL'S PATTERNS.



Each Package complete for either Brick or Frame Houses.

No. 1, for Shutters, $1\frac{1}{2}$ inch and less, per dozen sets,	-	-	-	-	\$2 00
" 2, " " 2 " " " " " " " "	-	-	-	-	2 00

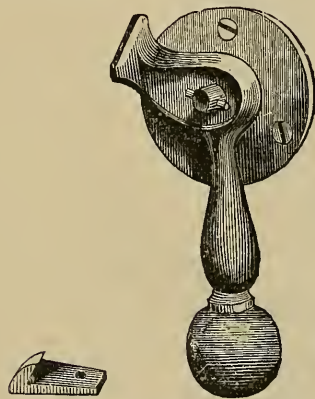
## STETSON'S DROP PATTERNS.



FOR BRICK.



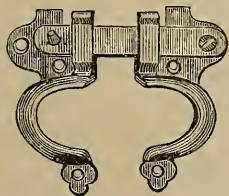
INSIDE FASTENERS.



FOR FRAME.

For Brick Buildings, complete with Inside Fasteners, per dozen sets,	-	\$2 00
" Frame " " " " " " " "	-	2 00
Inside Fasteners, separate, per dozen sets,	-	35

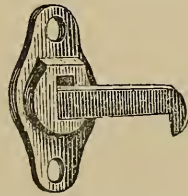
## STEAMBOAT SHUTTER FASTENERS.



STEAMBOAT DROP BOLTS.

To hold Shutters shut.

Per dozen sets,	-	-	-	\$1 25
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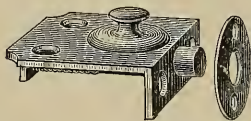


STEAMBOAT SHUTTER FASTENERS.

To hold Shutters open.

Per dozen pairs,	-	-	-	\$0 48
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## TRANSOM TRIMMINGS.



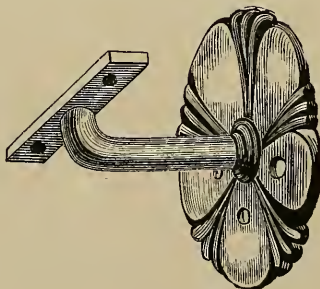
TRANSOM SPRINGS. TRANSOM PIVOTS. TRANSOM PIVOTS.  
 Per dozen, - - \$1 00 No. 1, per gross, - \$1 55 No. 2, per gross, - \$2 75

## HAND RAIL SCREWS.



No. 1, 4 by $\frac{3}{8}$ , double nut,	-	-	-	-	-	-	-	-	per gross, \$4 75
" 1, $4\frac{1}{2}$ by $\frac{3}{8}$ , "	"	"	-	-	-	-	-	-	" 5 25
" 1, 5 by $\frac{3}{8}$ , "	"	"	-	-	-	-	-	-	" 5 75
" 2, 4 by 5-16, "	"	"	-	-	-	-	-	-	" 3 75
" 2, $4\frac{1}{2}$ by 5-16, "	"	"	-	-	-	-	-	-	" 4 25
" 2, 5 by 5-16, "	"	"	-	-	-	-	-	-	" 4 75
" 3, 4 by $\frac{3}{8}$ , half wood screw, single nut,	-	-	-	-	-	-	-	-	" 5 50
" 3, $4\frac{1}{2}$ by $\frac{3}{8}$ , "	"	"	"	"	"	-	-	-	" 6 00
" 3, 5 by $\frac{3}{8}$ , "	"	"	"	"	"	-	-	-	" 6 50
" 3, $5\frac{1}{2}$ by $\frac{3}{8}$ , "	"	"	"	"	"	-	-	-	" 7 00
" 4, 4 by 7-16, "	"	"	"	"	"	-	-	-	" 5 50
" 4, $4\frac{1}{2}$ by 7-16, "	"	"	"	"	"	-	-	-	" 6 00
" 4, 5 by 7-16, "	"	"	"	"	"	-	-	-	" 6 50
" 4, $5\frac{1}{2}$ by 7-16, "	"	"	"	"	"	-	-	-	" 7 00

## STAIR RAIL BRACKETS.



Bronzed, per dozen, - - - - - \$3 25

# SASH WEIGHTS.

Per pound, - - - - - 3¼ cents.

## APPROXIMATE WEIGHT OF ROUND WEIGHTS.

6 Light Sash. 1⅜ inch.	4 Weights, each to weigh	1¼ inch diameter.	1⅝ inch diameter.	1½ inch diameter.	1⅜ inch diameter.	1¼ inch diameter.	2 inch diameter.
8 by 10	4 lbs.	12 in.	11 in.	10 in.	- -	- -	- -
9 " 12	5 "	15 in.	14 in.	13 in.	- -	- -	- -
9 " 14	5½ "	16 in.	15 in.	14 in.	- -	- -	- -
9 " 15	6 "	18 in.	17 in.	15 in.	13 in.	11 in.	8 in.
9 " 16	6½ "	19 in.	18 in.	16 in.	14 in.	12 in.	9 in.
10 " 12	5 "	15 in.	14 in.	13 in.	11 in.	10 in.	7 in.
10 " 14	5 "	18 in.	17 in.	15 in.	13 in.	11 in.	8 in.
10 " 15	6½ "	19 in.	18 in.	16 in.	14 in.	12 in.	9 in.
10 " 16	7¼ "	21 in.	20 in.	18 in.	15 in.	13 in.	10 in.
10 " 17	7½ "	22 in.	21 in.	19 in.	15 in.	14 in.	10 in.
10 " 18	7¾ "	23 in.	22 in.	20 in.	16 in.	14 in.	11 in.
10 " 19	8¼ "	24 in.	23 in.	21 in.	17 in.	15 in.	11 in.
10 " 20	8¾ "	25 in.	24 in.	22 in.	18 in.	16 in.	12 in.
10 " 21	9¼ "	- -	- -	23 in.	19 in.	16 in.	13 in.
10 " 22	10 "	- -	- -	25 in.	20 in.	18 in.	14 in.
10 " 24	10½ "	- -	- -	- -	20 in.	18 in.	14 in.
10 " 26	11½ "	- -	- -	- -	23 in.	20 in.	16 in.
11 " 15	7 "	- -	- -	- -	15 in.	13 in.	10 in.
11 " 16	7½ "	- -	- -	- -	15 in.	14 in.	10 in.
11 " 17	7¾ "	- -	- -	- -	16 in.	14 in.	11 in.
11 " 18	8¼ "	- -	- -	- -	17 in.	15 in.	11 in.
11 " 19	8½ "	- -	- -	- -	17 in.	15 in.	12 in.
11 " 20	8¾ "	- -	- -	- -	17 in.	15 in.	12 in.
11 " 21	8¾ "	- -	- -	- -	18 in.	16 in.	12 in.
11 " 22	9 "	- -	- -	- -	19 in.	16 in.	13 in.
11 " 24	10 "	- -	- -	- -	20 in.	18 in.	14 in.
11 " 26	11 "	- -	- -	- -	22 in.	19 in.	15 in.
12 " 16	8 "	- -	- -	- -	17 in.	14 in.	11 in.
1¼ in. Sash.							
12 by 18	10 "	- -	- -	- -	20 in.	18 in.	14 in.
12 " 20	11 "	- -	- -	- -	22 in.	19 in.	15 in.
12 " 22	12 "	- -	- -	- -	24 in.	21 in.	16 in.
12 " 24	13 "	- -	- -	- -	26 in.	23 in.	17 in.



We make a specialty of Sash Weights. They are smooth, tapered at each end, to prevent catching on each other; size and weight cast on each one.

For convenience in ordering, we give our Table of Sizes, as it frequently happens that by following instructions as to diameter, &c., we get them too long for the pockets for which they are intended. The weight of Sash we have given, though not exact, is near enough for all practical purposes. It is safer, however, always to WEIGH THE SASH.

Square Weights are not so good, but are about one-third heavier than round, and are only made to order.

**ORDER FOUR TO A WINDOW—NOT TOO LONG FOR THE POCKET.**

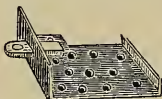


## STAR ANCHORS.



No. 1, 8 inch Star, 15 inch shank, for 9 inch walls, per dozen,	-	-	\$4 80
" 2, 10 " " 17 " " " 13 " " " "	-	-	6 00
" 3, 12 " " 20 " " " 17 " " " "	-	-	9 00
Without shanks, per pound,	-	-	05

## IRON BRICK FOR HANGING IRON SHUTTERS.



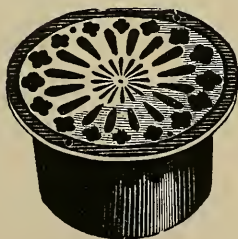
No. 1, light pattern, per pair,	-	-	-	-	-	-	-	-	\$0.80
" 2, heavy " "	-	-	-	-	-	-	-	-	1 20

## SPOUT SHOES.



3½ foot long, for 3 inch spout, each,	-	-	-	-	-	-	-	-	\$3 00
5 " " " 3 " " " "	-	-	-	-	-	-	-	-	4 00
5 " " " 4 " " " "	-	-	-	-	-	-	-	-	5 00
5 " " " 6 " " " "	-	-	-	-	-	-	-	-	8 50

## COAL HOLE COVERS.



16 in. diameter, 10 in. deep, each, \$5 50

## CISTERN COVERS.



16 inch inside, each,	-	-	\$4 00
19 " " " "	-	-	6 00

We furnish the 16 inch with a cover, fitted to our Chain Pump Curbs.



## STAIR STEP PLATES.

## Painted.

14 by 6 inches, - - each, \$0 40	27 by 7½ inches, - - each, \$0 75
18 by 6 " - " 50	30 by 6 " - " 85
24 by 6 " light, - " 55	30 by 7 " - " 95
24 by 6 " heavy, " 60	36 by 8 " - " 1 20
24 by 7 " - " 80	48 by 8 " - " 1 60
24 by 7½ " - " 85	Brass of above sizes, per pound, 40

## VENTILATOR GRATES.

No. 1, 8 by 9, flanged, - - - - - each, \$0 90
" 2, 12 by 13, " - - - - - " 1 25
" 3, 9 by 9, plain, - - - - - " 60
" 4, 8 by 9, " - - - - - " 75
" 5, 8 by 12, " - - - - - " 85
" 6, 10 by 14, fancy pattern, - - - - - "
" 7, 12 by 14, " " - - - - - "
" 8, 10½ by 15, " " - - - - - "
" 9, 13 by 15, " " - - - - - "
" 10, 18 by 36, " " - - - - - "

## GATE WEIGHTS.

4½	6	14 pounds.
\$0 35	50	1 00 each.

## BOX DRAIN GRATES.

11 by 13 inches, - - - - - each, \$6 00
---

## STRAINER GRATES.

No. 1, 11 inches diameter, round pattern, - - - - - each, \$0 50
" 2, 13 " " " " - - - - - " 1 25
" 3, 10 " " square " - - - - - " 65

## SINK AND STENCH TRAPS.

Size of hole, 11½ inches, - - - - - each, \$3 00
--

## WROUGHT HASPS AND STAPLES.

JAPANNED AND PACKED IN PAPER BOXES.

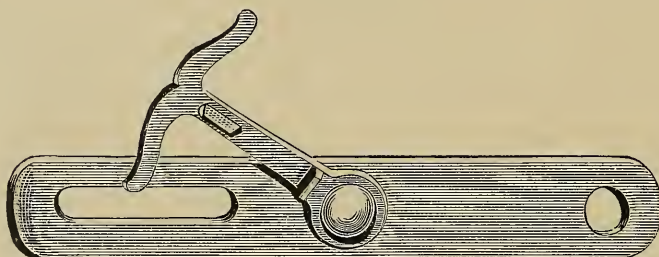


3	4	5	6	7	8	9	10	11	12 inch.
\$0 68	73	78	90	1 06	1 24	1 38	1 54	1 84	2 64 per dozen.

## WROUGHT HASPS AND STAPLES.

With Double Hooks.

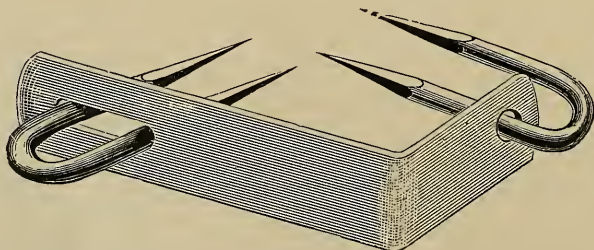
JAPANNED AND PACKED IN PAPER BOXES.



5	6	7	8	9	10	11	12 inch.
\$1 30	1 44	1 58	1 76	1 98	2 20	2 64	3 84 per dozen.

## WROUGHT BENT HASPS AND STAPLES.

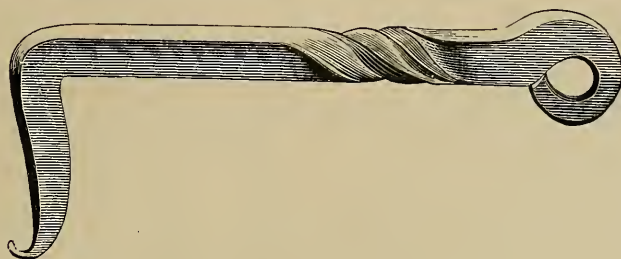
JAPANNED AND PACKED IN PAPER BOXES.



4	5	6	7	8	9	10 inch.
\$0 85	90	1 02	1 16	1 30	1 50	1 76 per dozen.

## WROUGHT HOOKS AND STAPLES.

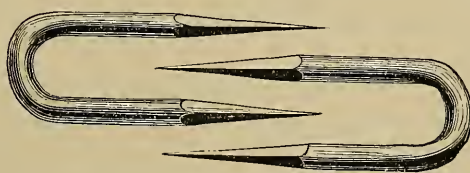
JAPANNED AND PACKED IN PAPER BOXES.



2	2½	3	3½	4	4½	5	5½	6	7	8	9	inch.
\$4 90	5 40	6 10	6 40	7 12	8 80	9 76	11 00	11 60	14 60	18 00	20 00	gross.

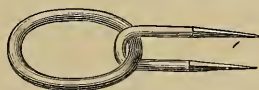
## WROUGHT STAPLES.

PACKED IN PAPER BOXES.



1	1½	2	2½	3	3½	4	4½	5	inch.
\$1 04	1 06	1 32	1 80	2 60	3 20	5 00	6 00	6 50	per gross.

## TRAP DOOR RINGS AND STAPLES.



1½	1¾	2	2¼	2½	2¾	3	3½	4	inch.
45	50	60	70	80	90	1 00	1 10	1 20	cents per dozen.

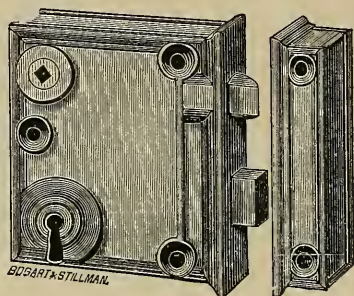
## CORNER IRONS FOR SHUTTERS.



	1	1½	1¾	1¾	1½	1¾	2	2½	3	inches wide.
Edges filed, 80	1 00	1 20	1 40	1 60						cents per dozen.
Not filed, 70	90	1 10	1 30	1 50						" "

# LOCKS AND LATCHES.

## JANUS FACED UPRIGHT RIM KNOB LOCKS.



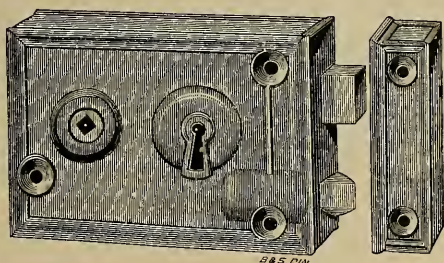
For Right or Left Hand Doors.

No.	Size.	KNOBS AND ESCUTCHEONS AS ORDERED. Packed complete with Screws to match. Quarter Dozen Bundles. Six Dozen in a Case.	Without Knobs.	Mineral	Porcel'in	Porcel'in
				Knobs & Japan'd Mount'gs	Knobs & Japan'd Mount'gs	Knobs & Plated Mount'gs
503	4 by 3 $\frac{1}{4}$	Iron Bolts, Tinned Keys, 1 Tumbler, per dozen, - - - -	\$3 75	\$5 35	\$5 75	\$10 75
504	4 by 3 $\frac{1}{4}$	Iron Bolts, Brass Keys, 1 Tumbler, per dozen, - - - -	4 50	6 10	6 50	11 50
501	4 $\frac{1}{4}$ by 3 $\frac{1}{4}$	Iron Bolts, Tinned Keys, 1 Tumbler, Latch Stop, - - per dozen,	4 00	5 60	6 00	11 00
502	4 $\frac{1}{4}$ by 3 $\frac{1}{4}$	Iron Bolts, Brass Keys, 1 Tumbler, Latch Stop, - - per dozen,	4 75	6 35	6 75	11 75
500	4 $\frac{1}{2}$ by 3 $\frac{1}{2}$	Iron Bolts, Coppered Keys, 1 Tum- bler, Latch Stop, - per dozen,	4 25	5 85	6 25	11 25
510	4 $\frac{1}{2}$ by 3 $\frac{1}{2}$	Iron Bolts, Brass Keys, 1 Tumbler, Latch Stop, - - per dozen,	6 00	7 60	8 00	13 00
520	4 $\frac{1}{2}$ by 3 $\frac{1}{2}$	Brass Bolts, Brass Keys, 1 Tumbler, Latch Stop, - - per dozen,	7 50	9 10	9 50	14 50

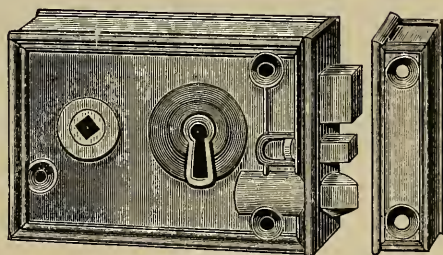
TO REVERSE THE LATCH, grasp it with the thumb and finger and force it in the case sufficiently to allow it to revolve; turn it half around, and it will resume its place reversed.



## JANUS FACED HORIZONTAL RIM KNOB LOCKS.



Nos. 301 — 402



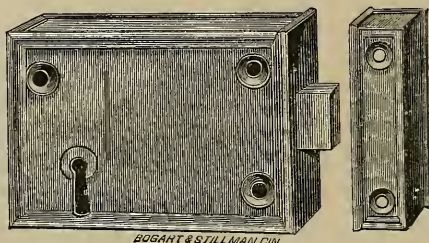
Nos. 310 — 412

**For Right or Left Hand Doors.**

No.	Size.	KNOBS AND ESCUTCHEONS AS ORDERED. Packed complete with Screws to match. Quarter Dozen Bundles.      Six Dozen in a Case.	Without Knobs.	Mineral	Porcel'n	Porcel'n
				Knobs & Japan'd Mount'gs	Knobs & Japan'd Mount'gs	Knobs & Plated Mount'gs
301	5 by 3½	Iron Bolts, Coppered Keys, 1 Tumbler, - - - per dozen,	\$5 50	\$7 10	\$7 50	\$12 50
300	5 by 3½	Iron Bolts, Brass Keys, 1 Tumbler, per dozen, - - - -	6 50	8 10	8 50	13 50
302	5 by 3½	Brass Bolts, Brass Keys, 1 Tumbler, per dozen, - - - -	8 00	9 60	10 00	15 00
401	6 by 3½	Iron Bolts, Coppered Keys, 1 Tumbler, - - - per dozen,	6 50	8 10	8 50	13 50
400	6 by 3½	Iron Bolts, Brass Keys, 1 Tumbler, per dozen, - - - -	7 50	9 10	9 50	14 50
402	6 by 3½	Brass Bolts, Brass Keys, 1 Tumbler, per dozen, - - - -	9 00	10 60	11 00	16 00
310	5 by 3½	Iron Bolts, Coppered Keys, Slide Bolts, 1 Tumbler, - per dozen,	6 50	8 10	8 50	13 50
311	5 by 3½	Iron Bolts, Brass Keys, Slide Bolts, 1 Tumbler, - - per dozen,	7 50	9 10	9 50	14 50
312	5 by 3½	Brass Bolts, Brass Keys, Slide Bolts, 1 Tumbler, - - per dozen,	9 50	11 10	11 50	16 50
410	6 by 4	Iron Bolts, Coppered Keys, Slide Bolts, 1 Tumbler, - per dozen,	7 50	9 10	9 50	14 50
411	6 by 4	Iron Bolts, Brass Keys, Slide Bolts, 1 Tumbler, - - per dozen,	8 50	10 10	10 50	15 50
412	6 by 4	Brass Bolts, Brass Keys, Slide Bolts, 1 Tumbler, - - per dozen,	10 50	12 10	12 50	17 50



## JANUS FACED HORIZONTAL RIM DEAD LOCKS.

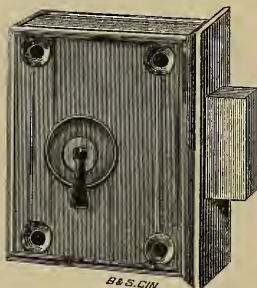


**For Right or Left Hand Doors.**

PACKED WITH ESCUTCHEON PLATES AND SCREWS.

<i>No.</i>	<i>Size.</i>						<i>per dozen.</i>
175,	3½ by 2½,	Iron Bolts,	Coppered Iron Keys,	-	-	-	\$2 75
0175,	3½ by 2½,	"	Brass Keys,	-	-	-	3 75
1750,	3½ by 2½,	Brass	"	-	-	-	5 00
51,	3½ by 2½,	Iron	Coppered Iron Keys, for Closet Locks,	-	-	-	2 00
051,	3½ by 2½,	"	Brass	"	"	"	3 00
0151,	3½ by 2½,	Brass	"	"	"	"	4 75

## JANUS FACED UPRIGHT STORE DOOR RIM DEAD LOCKS.

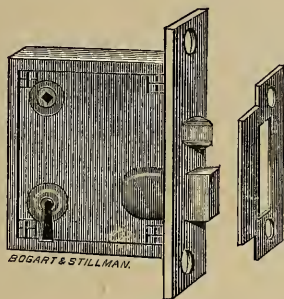


**Heavy, for Right or Left Hand Narrow Style Doors.**

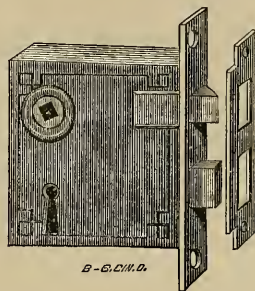
Constructed with great care, for outside or other Doors, where secure fastening is required.

No. 180,	5 inch,	3 Tumblers,	heavy Iron Bolts,	2 Brass Keys,	-	each,	\$1 50
" 182,	5	1	"	" " " 2	" -	"	92
" 190,	6	3	"	" " " 2	" -	"	1 75
" 192,	6	1	"	" " " 2	" -	"	1 10
" 280,	5	3	"	Brass " 2	" -	"	1 85
" 282,	5	1	"	" " " 2	" -	"	1 25
" 290,	6	3	"	" " " 2	" -	"	2 20
" 292,	6	1	"	" " " 2	" -	"	1 50

## MORTISE KNOB LOCKS.



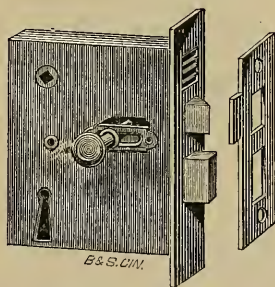
No. 75



No. 70

No.	Size.	For Right or Left Hand Doors, of usual thickness.	Without Furnit'e per doz.	Mineral Knobs & Japan'd Mount'gs per doz.	Porcel'n Knobs & Japan'd Mount'gs per doz.	Porcel'n Knobs & Plated Mount'gs per doz.
75	4 by 3 $\frac{1}{4}$	Iron Bolts, Lacquered Iron Face and Strikers, Copp'd Keys, 1 Tumbler,	\$5 00	\$6 60	\$7 00	\$15 00
70	4 $\frac{3}{4}$ by 3 $\frac{1}{2}$	Brass Bolts, Brass Hubs, Brass Face & Strikers, Brass Keys, 1 Tumbler,	12 00	13 60	14 00	22 00

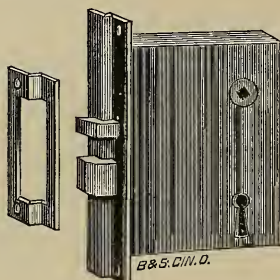
## MORTISE FRONT DOOR LOCKS.



With Night Works.

No.	Size.	For Doors of usual thickness.	Without Furniture, per doz.	Porcelain Knobs and Plated Mountings, per doz.
97	5 $\frac{1}{2}$ by 4 $\frac{1}{2}$	Brass Keys, Brass Bolts, Brass Hubs, Face and Strikers, Brass Latch Knob, and two Brass Night Keys, - - - - -	\$50 00	\$72 00

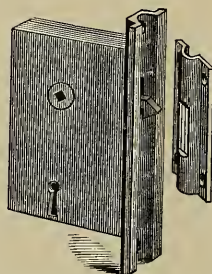
## RABBETED MORTISE KNOB LOCKS.



Japanned Cases. Very Heavy.

No.	Size.	PACKED WITH ESCUTCHEONS AND SCREWS.	Without Furniture.	Porcelain Knobs and Plated Mountings.
90	5 $\frac{1}{4}$ by 4	Cast Case, 2 Brass Bolts, Brass Hubs, Fronts and Strikers, Brass Keys, - - each,	\$2 75	\$4 00
91	6 by 5	Wrought Iron Case, 2 Brass Bolts, Brass Keys, Brass Fronts, Hubs & Strikers, 3 Tumblers, each, - - - - -	11 00	12 25
92	4 by 2 $\frac{3}{4}$	Wrought Iron Case, guarded Bolts, 2 Brass Bolts, Hubs, Fronts & Strikers, Brass Keys, 3 Tumblers, for narrow style Doors, each,	4 00	5 25

## SLIDING DOOR MORTISE KNOB LOCKS.



Japanned Iron Cases.

No.	Size.	PACKED WITH ESCUTCHEONS AND SCREWS.	Without Furniture.	Porcelain Knobs and Plated Mountings.
86	5 by 3 $\frac{1}{2}$	Cast Case, Astragal Brass Fronts, Brass Hubs and Strikers, 2 Brass Bolts and Keys, each, Packed in Pairs. One each of Nos. 171 & 172. To match.	\$1 67	\$2 92
171 AND	5 $\frac{1}{4}$ inch,	Wrought Case, Upright Astragal Brass Front, Brass Hubs and Strikers, Brass Keys, -	} 4 60	6 35
172	5 $\frac{1}{4}$ "	Upright Reverse Astragal Brass Front, Brass Hubs, - - - - -		

## SLIDING DOOR RIM KNOB LOCKS.

## JAPANNED IRON CASES.

No. Size.

per dozen.

88, 4 by 4, Brass Keys, Brass Latch and Hubs, without Furniture, - \$10 50

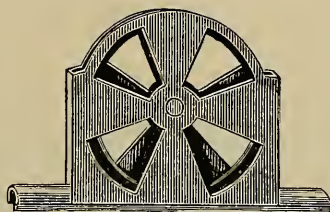
## SLIDING DOOR MORTISE KNOB LATCHES.

## JAPANNED IRON CASES.

No. 89, Astragal Brass Front, Brass Latch, Brass Hubs and Strikers,  
without Furniture, - - - - - per dozen, \$10 00

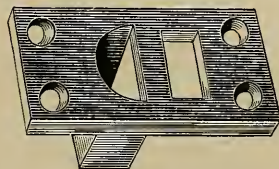
" 89½, Plain Front, Brass Latch, Brass Hubs and Strikers, without  
Furniture, - - - - - per dozen, 8 00

## SLIDING DOOR SHEAVES AND RAIL.



	3	4	5	6 inch.
SHEAVES—all Iron, Japanned, per set of four, \$1 00	1 25	1 50	2 00	
" Brass Wheels and Face, Wro't Iron Case,	5 75	7 50	8 75	
RAIL—1 inch, Iron, Japanned, in 2-foot lengths,	-	-	per foot, 7 cents.	
" 1½ " " " " " " " " " "	-	-	" 8 "	
" 1 and 1½ inch, Brass, in 18-inch lengths,	-	-	" 65 "	
" Astragal and Brass, in lengths to order,	-	-	per foot, \$1 10	

## SLIDING DOOR STOPS.

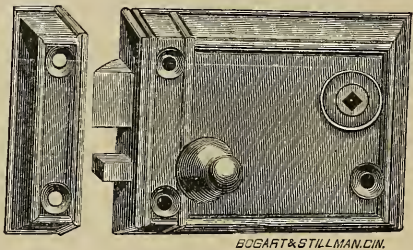


Iron, Japanned,	-	-	-	-	-	-	-	per dozen, \$0 60
Brass,	-	-	-	-	-	-	-	" 3 50

In ordering Sliding Door Trimmings, give the height and width of the door, and distance from center of lock-rail to the bottom of door.

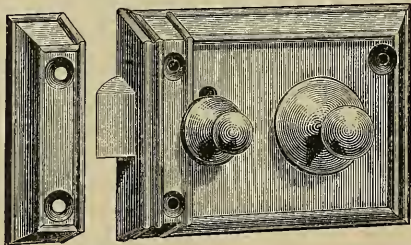


RIM KNOB LATCHES.



No.	Size.	For Right or Left Hand Doors. PACKED WITH ESCUTCHEONS AND SCREWS.	Without Furniture.	Mineral Knobs and Japanned Mountings.	Porcelain Knobs and Japanned Mountings.
60	3 $\frac{3}{4}$ by 2 $\frac{3}{4}$	Iron Bolts, Brass Knob, per dozen,	\$3 00	\$4 60	\$5 00
060	3 $\frac{3}{4}$ by 2 $\frac{3}{4}$	Brass Bolts, Brass Knob, “	4 00	5 60	6 00

HORIZONTAL RIM NIGHT LATCHES.

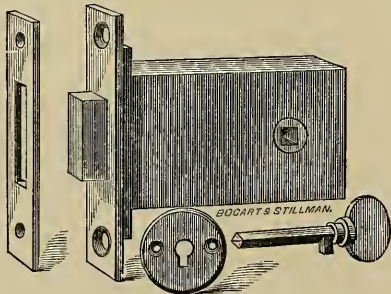


For Right or Left Hand Doors.

PACKED WITH ESCUTCHEONS AND SCREWS.

No. 3, 3 $\frac{1}{2}$  by 2 $\frac{1}{2}$ , 2 Brass Drilled Pin Keys, Brass Slide Knob, Brass Stop,  
a Safe Latch, complete, - - - - - per dozen, \$8 00

MORTISE DOOR BOLTS.

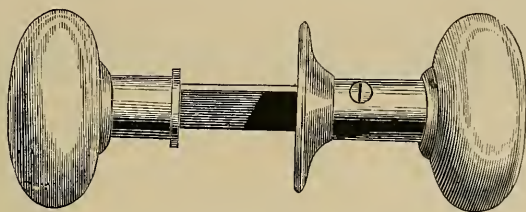


No. 3, Square Case, 2 $\frac{3}{4}$  inches; Brass Front, Hub and Striker; Brass Bolts  
and Turn Keys, and Escutcheons, - - - - - per dozen, \$9 00



## DOOR KNOBS.

Eastern Pattern Extension Spindles.



For Rim and Mortise Locks.

PACKED WITH JAPANNED OR PLATED SCREWS TO MATCH ROSES.

No. 100, Rim Mineral Knobs, Japanned Mountings, - -	per dozen, \$1 60
" 200, " Porcelain " " " - -	2 00
" 230, " " " Plated " - -	6 00
" 110, Mortise Mineral " Japanned " - -	1 60
" 210, " Porcelain " " " - -	2 00
" 235, " " " Plated " - -	6 00

KNOBS ON SWIVEL SPINDLES.—Extra, per dozen, - - - - \$3 00

## CRANK HANDLES AND KNOBS.

No. 13, 2¼ inch, Mineral Knob, Japanned Crank, - -	per dozen, \$5 00
" 140, 2¼ " Porcelain " " " - - -	8 00
" 14, 2¼ " " " Plated " - -	15 00
" 51, 2¼ " Brass Knob, Brass Lever Handle, - -	23 00
" 5100, " Lever Handle, both ends, - -	18 00
" 510, " T " " " - - -	18 00

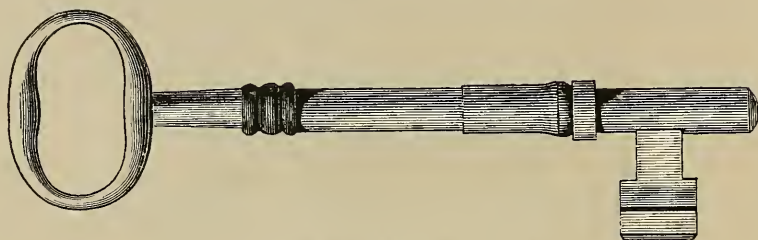
## BRASS AND PLATED DOOR KNOBS.

For Rim and Mortise Locks.

No.	Size.	Packed Complete with Screws to Match.	Brass.	Electro-Plated.	Hand-Plated.
300	1¾ inch,	Rim, open end, - - per dozen,	\$9 00	- -	- -
301	1⅞ "	" or mortise, - "	11 00	- -	- -
305	2 "	" " " - - "	14 50	\$24 00	\$45 00
310	2¼ "	" " " - "	18 00	28 00	50 00
315	2½ "	" " " - - "	20 00	30 00	68 00

In ordering Knobs specify "RIM" or "MORTISE."

## BRASS AND IRON KEYS.



## For Rim and Mortise Locks.

No. 50, Iron, for Locks	No. 75, - - - - -	\$o 37½
" 52, " " " "	401, 410, - - - - -	37½
" 53, " " " "	300, 310, - - - - -	37½
" 54, " " " "	501, 503, - - - - -	37½
" 55, " " " "	500, - - - - -	37½
" 2, Brass, " " "	70, 75, - - - - -	I 25
" 6, " " " "	86, 90, 171, - - - - -	I 35
" 7, " " " "	91, - - - - -	I 50
" 8, " " " "	97, - - - - -	I 76
" 11, " " " "	88, - - - - -	I 50
" 19, " " " "	400, 401, 402, 411, 412, - - - - -	I 50
" 21, " " " "	300, 302, 311, 312, 502, 504, 510, 520, - - - - -	I 35
" 30, " " " "	3, - - - - -	I 35
" 31, " " " "	180, 182, 190, 192, - - - - -	2 50
" 41, " " " "	180, 182, 190, 192, - - - - -	2 25

BRASS BLANK KEYS, for Rim and Mortise Locks, to order.

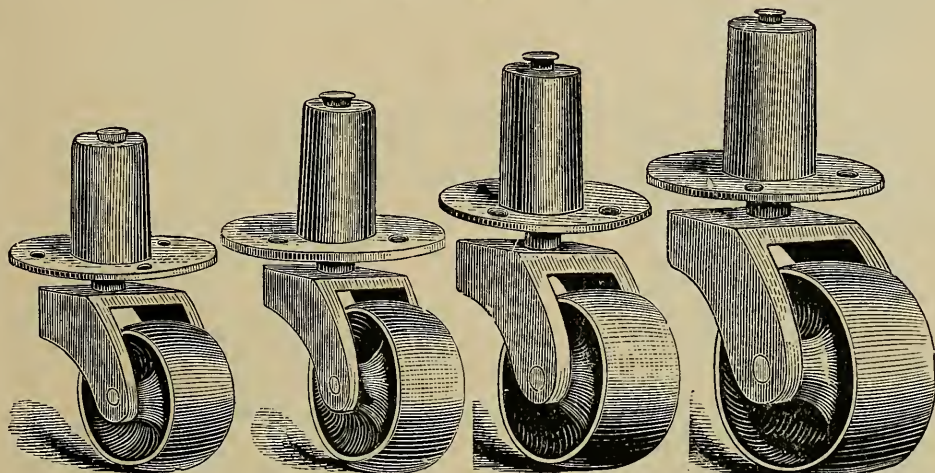
## ESCUTCHEONS.

No.	Packed Complete with Screws to Match.	Iron Japan'd	Brass.	Electro- Plated.	Hand- Plated.
1	Plate Raised Pattern, 13-16 inch key-hole, for Locks 5 inches and under, - - -	30c.	\$o 75	\$2 00	- -
5	Plate Raised Pattern, ⅞ inch key-hole, for Locks 6 inches, - - -	- -	2 50	4 50	\$9 00
40	Drop Flat Pattern, 1 inch key-hole, for Locks 6 and 7 inches, - - -	- -	6 00	9 50	12 00
30	Drop Raised Pattern, 1 inch key-hole, for Locks 6 and 7 inches, - - -	- -	3 50	5 25	7 00
31	Drop Raised Pattern, 1½ inch key-hole, for Locks No. 97, - - -	- -	5 00	8 00	10 50
20	Night Key Pattern, ⅝ inch long key-hole, for Locks No. 3, - - -	30c.	50	1 00	- -
21	Night Key Pattern, ½ inch round key-hole, for Locks No. 97, - - -	- -	50	1 00	2 50

# CABINET HARDWARE.

## PLATE CASTERS.

Long Wrought Pivots.

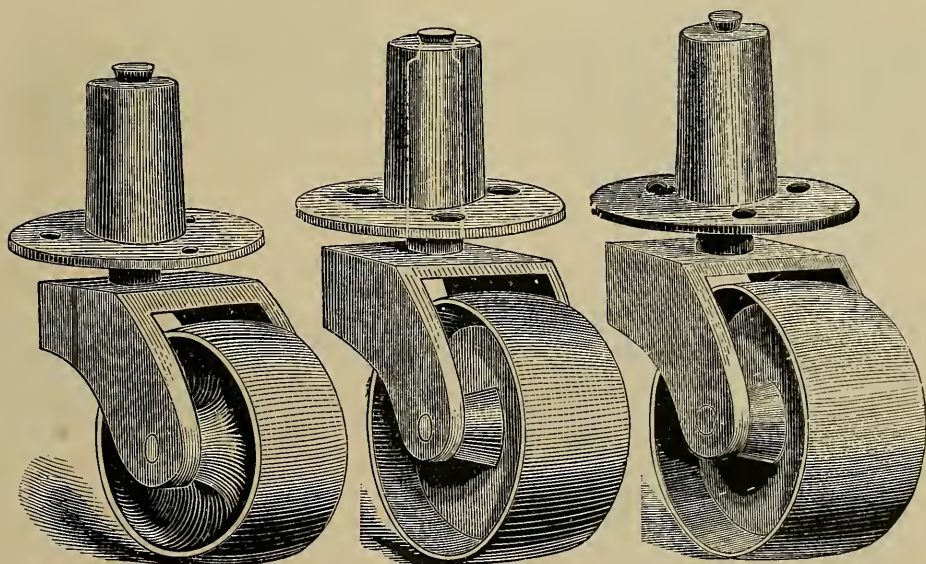


No. 1

No. 2

No. 3

No. 4



No. 5

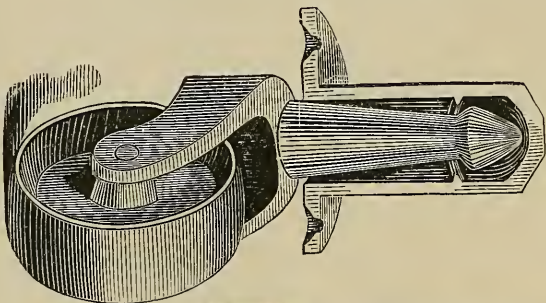
No. 6

No. 7

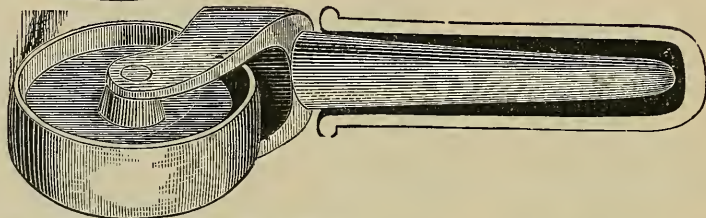


## BED CASTERS.

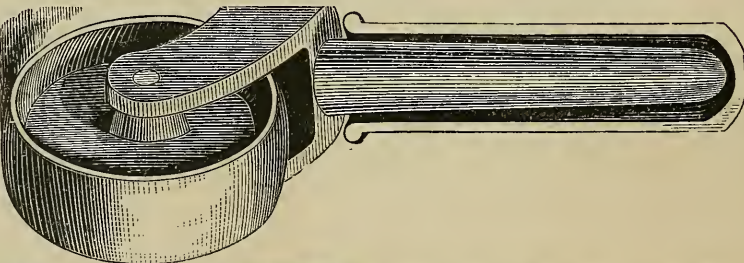
No. 19.



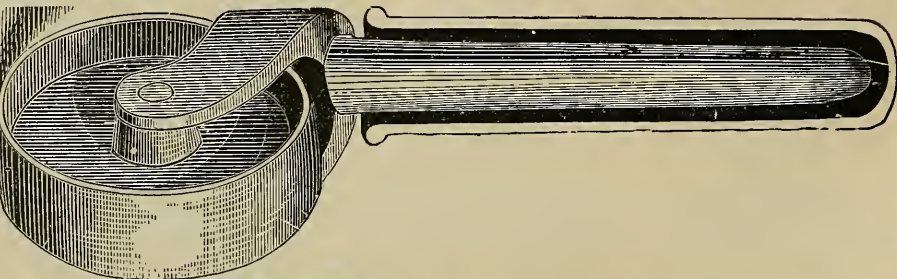
No. 1, 1½ inch.



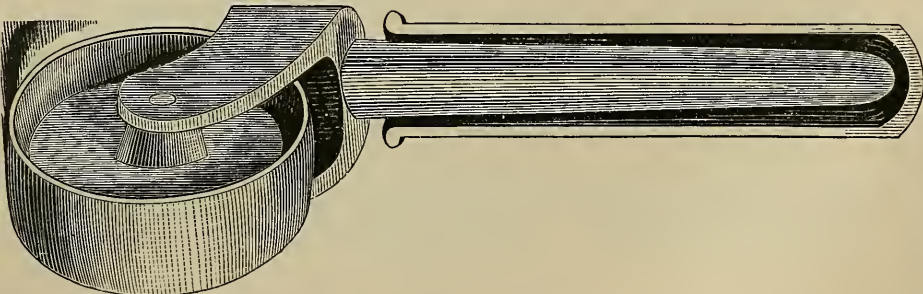
No. 2, 1½ inch.



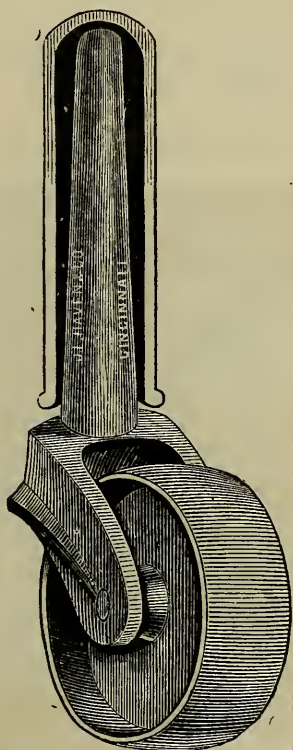
No. 1, 2 inch.



No. 2, 2 inch.

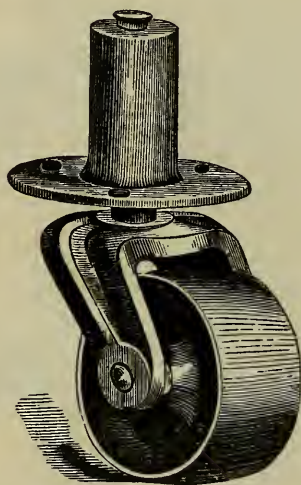


IMPROVED  
PATENT FURNITURE CASTERS.



1½ inch No. 2. Patent.

Heavy, all Iron, and with Porcelain Wheels.



No. 4. Patent.

All Iron, and with Porcelain Wheels.

We offer a full line of our

PATENT RIBBED CASTERS,

Which we have proved by actual tests to have more than double the strength of the common shape.

Prices the same as the old style. We ask our customers to order a sample lot.

There is no change in the size of the sockets, the frames only requiring strengthening.

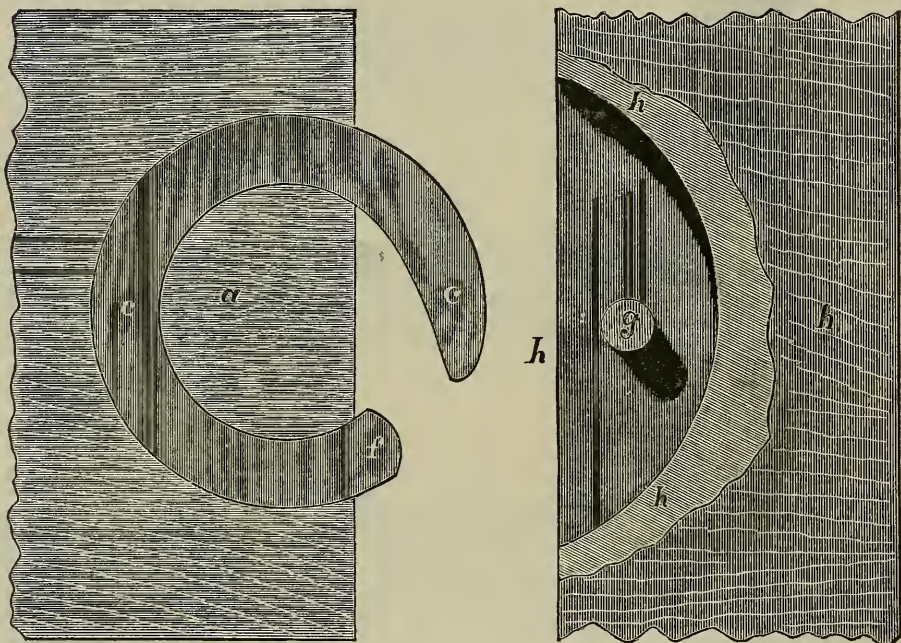


J. RODEFER.

## BEDSTEAD FASTENING.

Reissued June 20, 1871.

4492



ANN M. RODEFER,

*Administratrix of* JOSEPH RODEFER, *Inventor, dec'd.*

*By* KNIGHT BROS., *Attorneys.*

*Attest:* JAS. H. LAYMAN,  
JOHN KILOH.

# UNITED STATES PATENT OFFICE.

ANN M. RODEFER, OF HAMILTON COUNTY, ADMINISTRATRIX  
OF JOSEPH RODEFER, DECEASED; ASSIGNOR TO  
JAS. L. HAVEN & CO., OF CINCINNATI, O.

**Letters Patent No. 12,693, dated April 10, 1855; extended seven years;  
reissue No. 4,432, dated June 20th, 1871.**

## IMPROVEMENT IN BEDSTEAD FASTENINGS.

THE SCHEDULE REFERRED TO IN THESE LETTERS PATENT, AND MAKING PART OF THE SAME.

*To all whom it may concern :*

Be it known that JOSEPH RODEFER, deceased, late of Cincinnati, Hamilton county, Ohio, invented a new and useful Improvement in Bedstead Fastenings, of which the following is a specification.

### Nature and Objects of the Invention.

The invention consists in giving the shank, or that portion of the bedstead-fastening by which it is attached to the rail or post, an annular segmental form, adapted to occupy such a corresponding segmental cavity in the rail as can be excavated at a single operation by means of a rotary cutter, thus combining great strength and endurance with simplicity and cheapness of manufacture.

### General Description with Reference to the Drawing.

The drawing is a side elevation of a male or tenon part or member of a bedstead-fastening embodying said invention.

*a* is a portion of a bedstead rail, and  
*b* a post, which latter is shown partly in section.

The male or tenon member of the fastening is, in its simplest form, an annular segment, *c*, which is sunk into a corresponding annular groove or cavity in the side of the rail from whose end the portions *e* and *f* project to form

the tenons. One of these portions *e* being hooked, as shown, may engage over a pin, *g*, within the post-mortise *h*, within which the portion *f*, also engaging, prevents any turning of the rail in the post.

The member *c* may be secured against lateral displacement by a button or otherwise.

Where intended for use in conjunction with a common two-hole mortise-plate both projections may have the same hooked or dovetailed form as the upper one here shown, and may be strengthened by a brace or cord-piece, so as to have the form of the letter **D**.

While described, and chiefly intended for the tenon portion, the device is manifestly applicable for the mortise portion or member of a bedstead-fastener.

### Claim.

What is claimed as the invention of the said RODEFER is—

A bedstead-fastener, adapted to be held in place by being let into an annular groove on the side of the rail or post substantially as described.

In testimony of which invention I hereunto set my hand.

ANN M. RODEFER,

*Administratrix of Joseph Rodefer, deceased.*

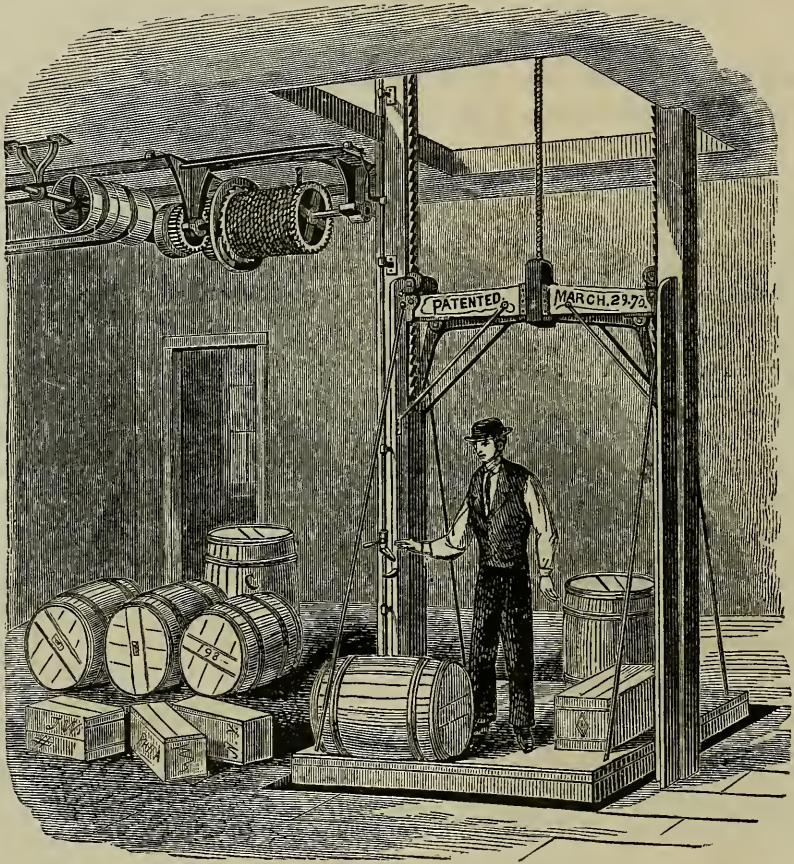
Witnesses: GEO. H. KNIGHT,  
THOS. McLEAN.

Above we give a full and accurate copy of the re-issue of the letters patent originally granted to JOSEPH RODEFER, April 10th, 1855. No one except us have the right to make **Ring Bedstead Fasteners**, and no furniture manufacturer has the right to use those made by any other party; and we most earnestly request infringers to stop without a law suit, which will certainly result if the violation of our rights is persisted in.

JAMES L. HAVEN & CO.  
KNECHT & KEMPF.



JAS. L. HAVEN & COMPANY'S  
PATENT  
STEAM POWER HOISTING MACHINE.



To those who have done their hoisting by power, nothing need be said of the advantages over the old-fashioned hand machines. To those who have not, we would say, there is no greater labor-saver than our Power Hoister.

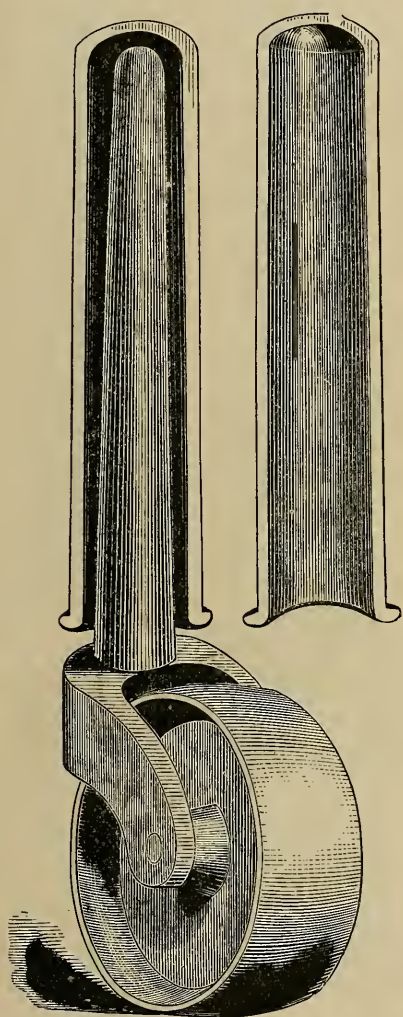
We have lately added improvements which render an accident almost impossible, either by breakage of the rope or by obstructions getting under the platform.

The starting and stopping arrangements are very simple and sure, requiring no attention to have it stop at any floor—when the catch is turned on the presence of an attendant being unnecessary.

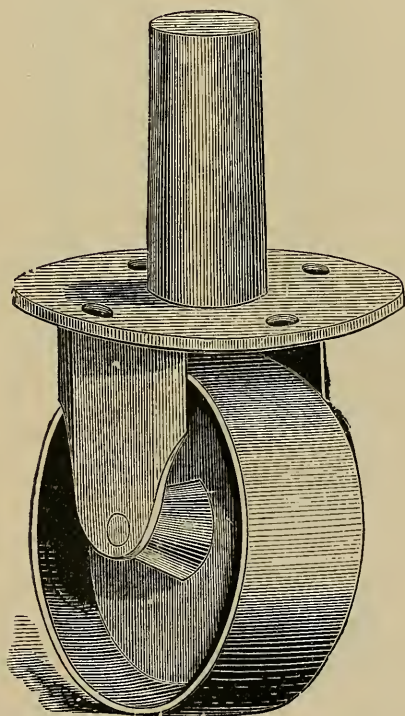
Particulars, adapted to every situation, given on application.

# CASTERS.

## BED AND EXTENSION TABLE CASTERS.



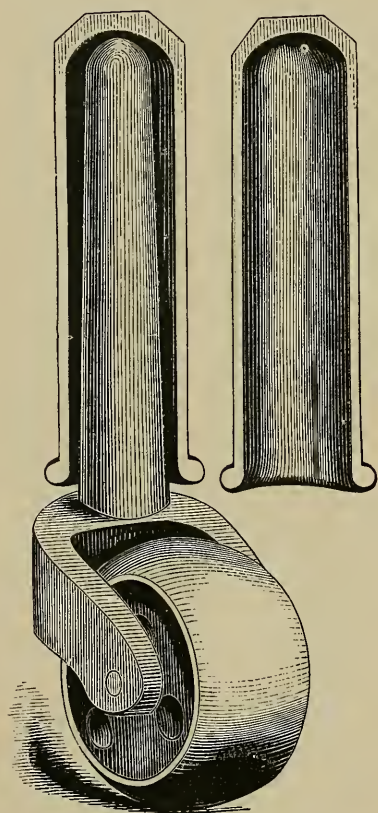
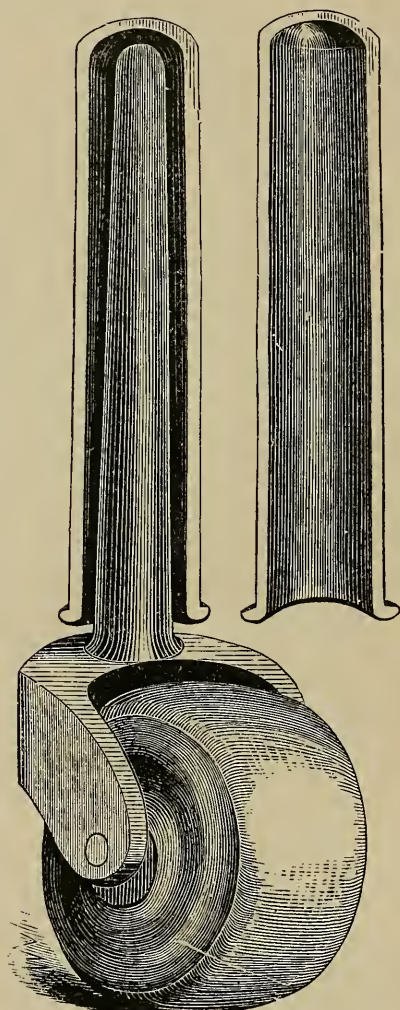
No. 4, 2 inch.



2 inch.

Steamboat Extension Table Casters.

## GLOBE WHEEL BED CASTERS.

1  $\frac{5}{8}$  INCH GLOBE WHEELS.

2 INCH GLOBE WHEELS.



# PRICE LIST OF CASTERS.

## PLATE CASTERS, LONG WROUGHT PIVOTS.

All Iron, Coppered.

Nos. 1	2	3	4	5	6	7
10	11	12	15	18	22	28 cents per set.

Porcelain Wheels, Coppered Iron Stems and Horns.

Nos. 1	2	3	4	5	6	7
17	20	23	30	40	50	60 cents per set.

Brass Wheels, Coppered Iron Stems and Horns.

Nos. 1	2	3	4	5	6	7
17	20	25	34	44	55	65 cents per set.

## BED CASTERS.

All Iron, Coppered.

Size, 1¼ inch, No. 19	1½ inch, No. 1	1½ inch, No. 2	1½ inch, No. 3
Sockets, 9-16	½	½	⅝ inch.
Per set, - 11	11	12½	14 cents.
Size, 2 inch, No. 1	2 inch, No. 2	2 inch, No. 3	2 inch, No. 4
Sockets, 9-16	9-16	⅝	⅝ inch.
Per set, - 14	15	16	17 cents.

Porcelain Wheels, Coppered Horns.

Size, 1¼ inch, No. 19	1½ inch, No. 1	1½ inch, No. 2	1½ inch, No. 3
Per set, - 22	21	23	25 cents.
Size, 2 inch, No. 1	2 inch, No. 2	2 inch, No. 3	2 inch, No. 4
Per set, - 26	27	28	35 cents.

The 1½ inch No. 3 and 2 inch No. 3 are new sizes (not illustrated), and are of extra weight and strength, at low prices.

## GLOBE WHEEL BED CASTERS.

	1½	2 inch.
All Iron, Coppered, - - - - -	20	32 cents per set.
Porcelain Wheels, Coppered Stems, - - -	32	40 " "

## STEAMBOAT EXTENSION TABLE CASTERS.

2 inch, all Iron, Coppered, - - - - -	37 cents per set.
Porcelain Wheels, Iron Horn, Coppered, - - - - -	75 " "

We have changed most of our patterns, greatly improving them in strength, and on some sizes have reduced the list.

# IRON BUREAU AND DRAWER HANDLES.

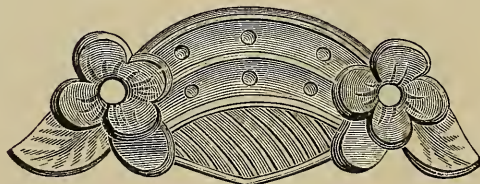
NOT JAPANNED.



Nos.	1	2	3
Length,	3¾	4¾	6 inches.
Per dozen,	30	35	45 cents.



Nos.	4	5	6
Length,	3¾	4¾	6 inches.
Per dozen,	30	35	40 cents.



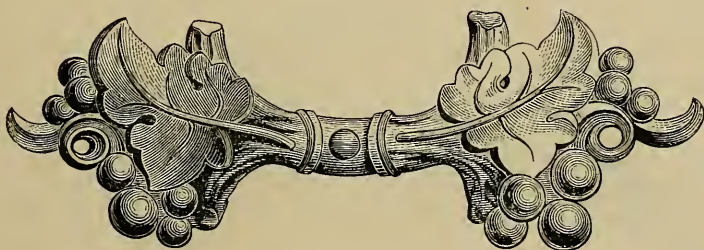
Nos.	7	8
Length,	4	5 inches.
Per dozen,	45	60 cents.

# IRON BUREAU AND DRAWER HANDLES.

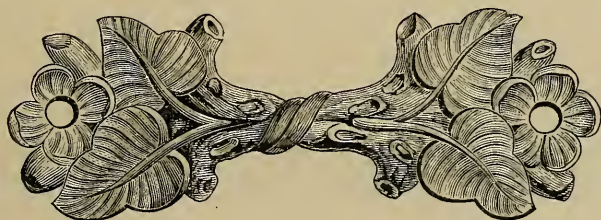
NOT JAPANNED.



Nos.	24	9	10
Length,	4¼	5¾	6½ inches.
Per dozen,	45	65	70 cents.



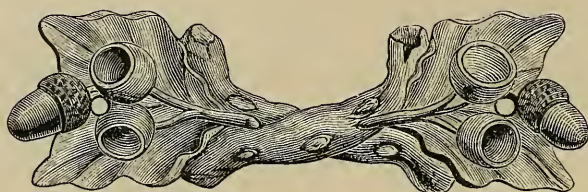
Nos.	23	11	12
Length,	5	6¼	7 inches.
Per dozen,	45	70	75 cents.



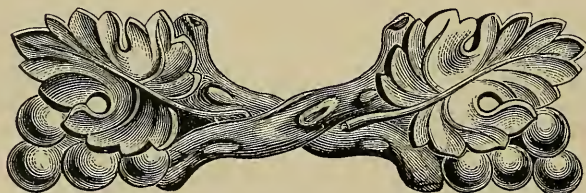
Nos.	21	13	14	15
Length,	4	5¼	6	6½ inches.
Per dozen,	45	60	70	80 cents.

# IRON BUREAU AND DRAWER HANDLES.

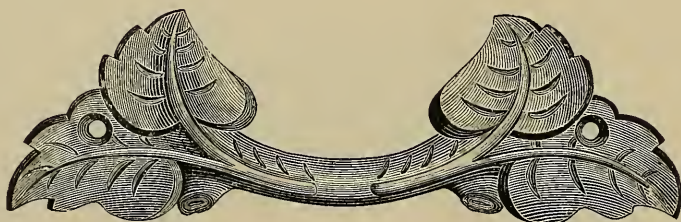
NOT JAPANNED.



Nos.	22	16	17
Length,	4	5¼	6 inches.
Per dozen,	45	70	75 cents.



Nos.	20	18	19
Length,	4	5¼	6 inches.
Per dozen,	55	70	75 cents.



Nos.	25	26
Length,	6¼	5¼ inches.
Per dozen,	60	50 cents.



## COFFIN HANDLES.



No. 1, Large Handle.

No. 2, Small Handle.



No. 3.

Nos.	1	2	3
Japanned, -	\$1 40	1 30	1 50 per dozen pairs.
Bronzed, - -	1 70	1 50	1 85 " "

## HEAD BOARD HOOKS AND SCREWS.



Malleable, per set, 4 connections, for one Bedstead, Japanned, - - 10 cents  
 " per pound, in bulk, Japanned, in lots of 100 pounds, - 15 "

100 sets weigh about 50 pounds, and they will be found far more satisfactory than the common cast usually sold, and as cheap, because lighter.

## HOOKS AND EYES.



JAPANNED OR POLISHED.

2	2½	3 inch.
\$2 00	2 25	2 50 per gross.

## LAMP HOOKS.



WITH GIMLET POINTED WROUGHT SCREWS.

Nos.	1	2
Length, 2¾		1¾ inches.
Japanned, \$2 50		1 80 per gross.



## COAT AND HAT HOOKS.



No. 1



No. 2



No. 3



No. 3½



No. 4



No. 5



No. 6



No. 7



No. 10



No. 11



No. 12

Nos.	1	2	3	3½	4	5	6	7	10	11	12
Length,	4½	4	3¾	3½	3½	3	4	3½	3	3½	4 inches.
No.	8	8			8	8	8	8	8	8	8 Screws.
Weight,	43½	38½	29	16½	17	19	35	19½	14½	21	28½ lbs. p. gro.
Jap'd, \$	4 35	3 85	2 90	1 65	1 70	1 90	3 50	1 95	1 45	2 10	2 85 per gro.
Cop'd, \$	4 50	4 00	3 15	1 90	1 85	2 15	3 75	2 10	1 60	2 25	3 10 " "

## SCREW HAT HOOKS.



GIMLET POINTED WROUGHT SCREWS.

2½	3	3½ inches, (besides Screw.)
Japanned, \$0 95	1 20	1 50 per gross.

## HOTEL OR SCHOOL HOUSE HOOKS.

VERY HEAVY AND STRONG.



No. 1

Length, 8

No. 9

Weight, 42½

Japanned, - \$4 25



No. 2

8 inches.

9 Screws.

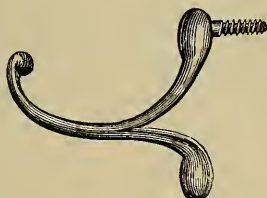
26 lbs. per gross.

2 65 per gross.

## WARDROBE HOOKS.



SINGLE.



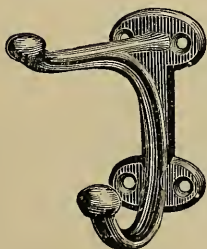
BRACED.



CEILING.

Nos.	SINGLE				BRACED				CEILING	
	1	2	3	20	4	5	6	60	wro't Screws.	
Japanned, \$o	45	60	80	50	90	1 05	1 50	90	2 00 per gross.	
Coppered,	50	66	88		1 00	1 15	1 65		2 25 " "	
No.	8	8	8	8				8	Screws.	
Weight,	4¼	5¼	7¼	5	9	10½	15	9	14¼ lbs. per gro.	

## HARNESS HOOKS.



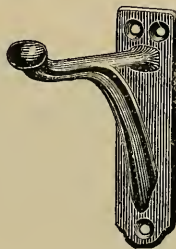
No. 1. DOUBLE.

Length, 8

Weight, 12½

No. 12

Japanned, \$1 25



No. 2. SINGLE.

8 inches.

12 lbs. per dozen.

12 Screws.

1 20 per dozen.

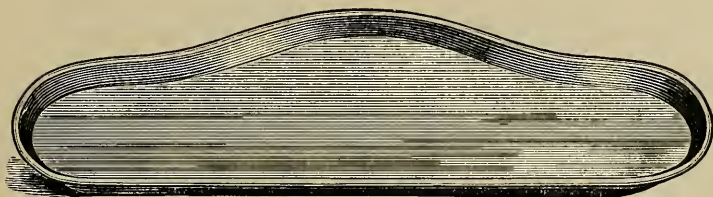


## HAT RACK DISHES.



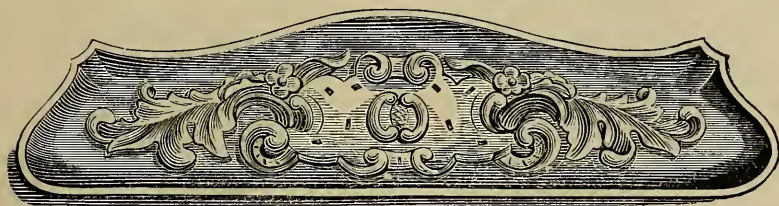
No. 6. OVAL—11 inches by 8 inches.

Plain,	-	-	-	-	-	each, 45 cents.
Japanned,	-	-	-	-	-	" 55 "
Bronzed,	-	-	-	-	-	" 75 "



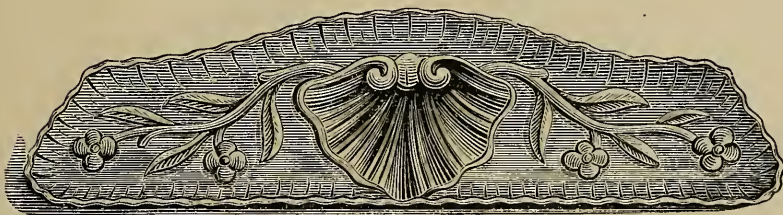
No. 7. 21 inches by 9¼ inches.

Plain,	-	-	-	-	-	each, \$0 70
Japanned,	-	-	-	-	-	" 80
Bronzed,	-	-	-	-	-	" 1 00



No. 8. 25 inches by 10 inches.

Plain,	-	-	-	-	-	each. \$1 05
Japanned,	-	-	-	-	-	" 1 20
Bronzed,	-	-	-	-	-	" 1 75



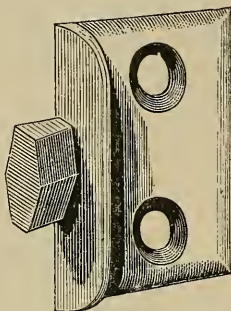
No. 9. 24 inches by 10 inches.

Plain,	-	-	-	-	-	each, \$1 05
Japanned,	-	-	-	-	-	" 1 20
Bronzed,	-	-	-	-	-	" 1 75



# LOUNGE AND TRUNDLE-BED FASTENERS.

List Price, 5 cents per pound.

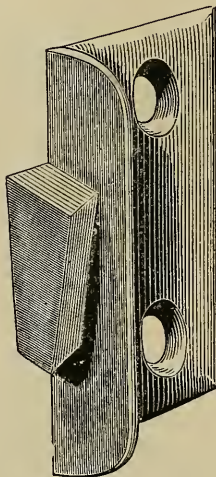
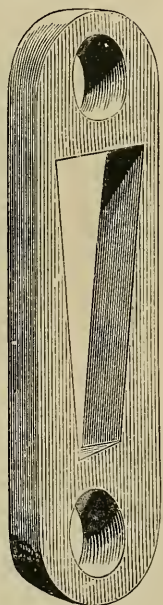


No. 6½

Size of Plate,  $\frac{7}{8}$  by 2 inches. Weight per set, 12 ounces; per 100 sets, 72 pounds.

Cost per 100 sets, at 5 cents per pound, - - - - - \$3 60

Require sixteen 1 inch No. 9 Wood Screws to a set (4 connections); over 11 gross for 100 Bedsteads.



No. 9½

Size of Plate, 1 by 3¼ inches. Weight per set, 1 lb. 4 oz.; per 100 sets, 124 pounds.

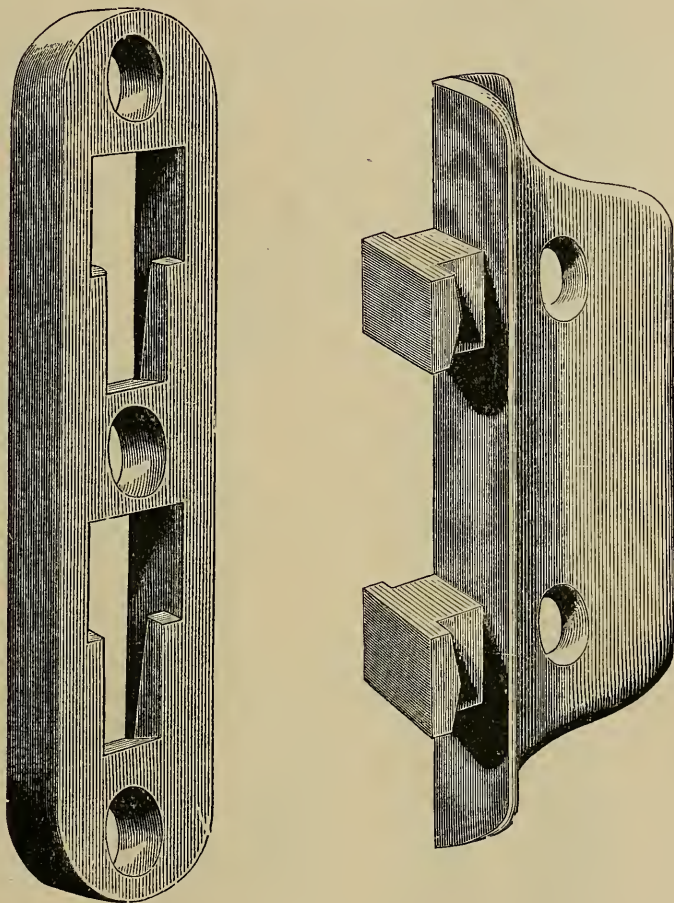
Cost per 100 sets, at 5 cents per pound, - - - - - \$6 20

Require sixteen 1¼ inch No. 11 Wood Screws to a set (4 connections); over 11 gross for 100 Bedsteads.



## BEDSTEAD FASTENERS.

List Price, 5 cents per pound.



No. 9

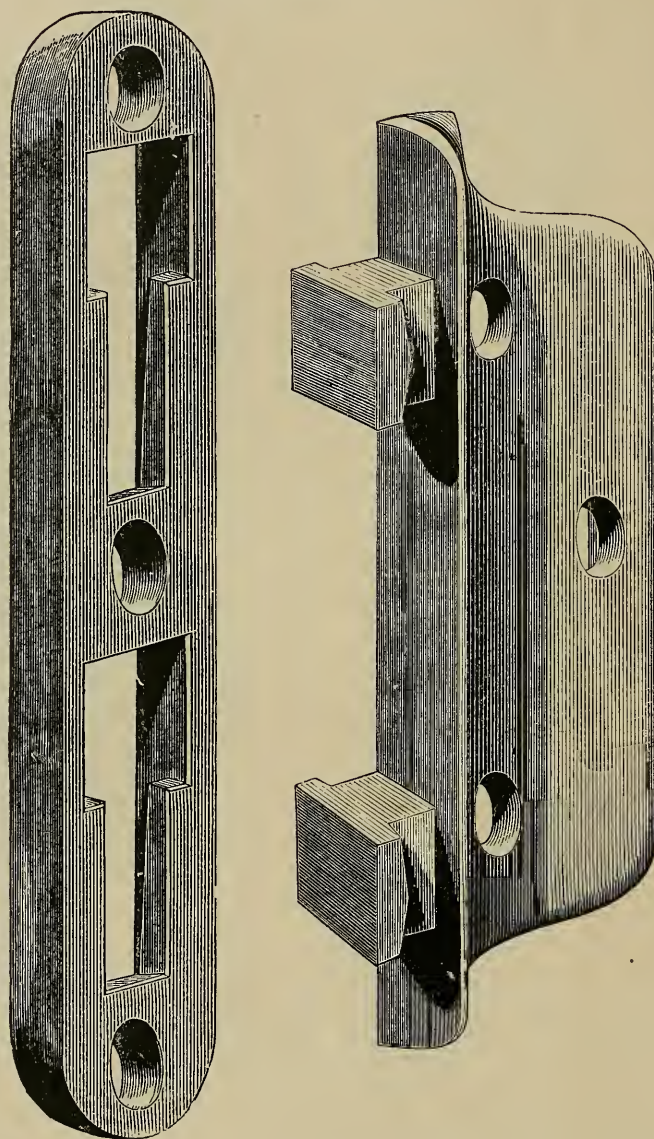
Size of Plate,  $1\frac{1}{4}$  by  $4\frac{1}{2}$  inches. Weight per set, 2 pounds 6 ounces;  
per 100 sets, 232 pounds.

Cost per 100 sets, at 5 cents per pound, - - - - - \$11 60

Require twenty  $1\frac{1}{2}$  inch No. 12 Wood Screws to a set (4 connections);  
14 gross for 100 Bedsteads.

## BEDSTEAD FASTENERS.

List Price, 5 cents per pound.



No. 10

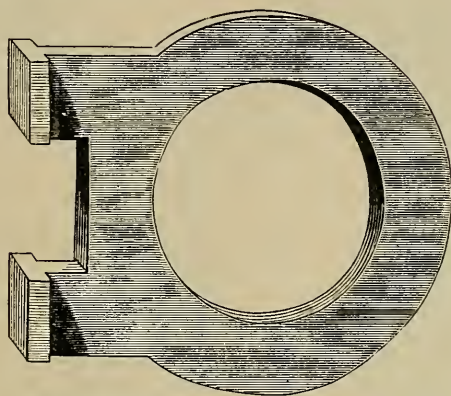
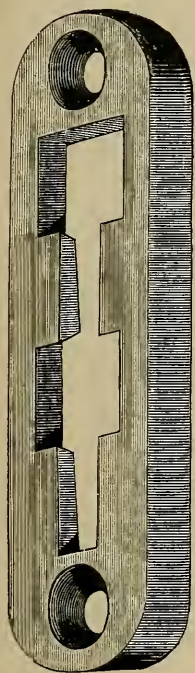
Size of Plate,  $1\frac{1}{4}$  by 6 inches. Weight per set,  $3\frac{3}{4}$  lbs.; per 100 sets, 375 lbs.

Cost per 100 sets, at 5 cents per pound, - - - - - \$18 75

Require twenty-four  $1\frac{1}{2}$  inch No. 13 Wood Screws to a set; about 17 gross for 100 Bedsteads.

## BEDSTEAD FASTENERS.

List Price, 5 cents per pound.

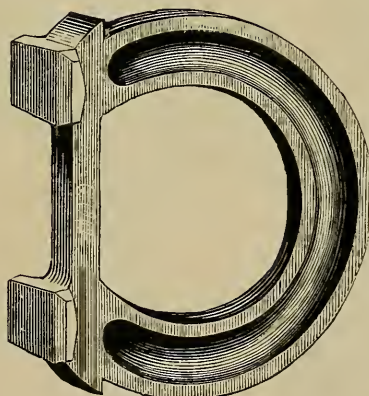


No. 50

Size of Plate,  $1\frac{1}{4}$  by  $3\frac{1}{2}$  inches.

Weight per set, 1 pound 6 ounces; per 100 sets, 140 pounds.

Cost per 100 sets, at 5 cents per pound, - - - \$7 00

Require eight  $1\frac{1}{4}$  inch No. 11 Wood Screws to a set; about 6 gross for 100 Bedsteads.

No. 150

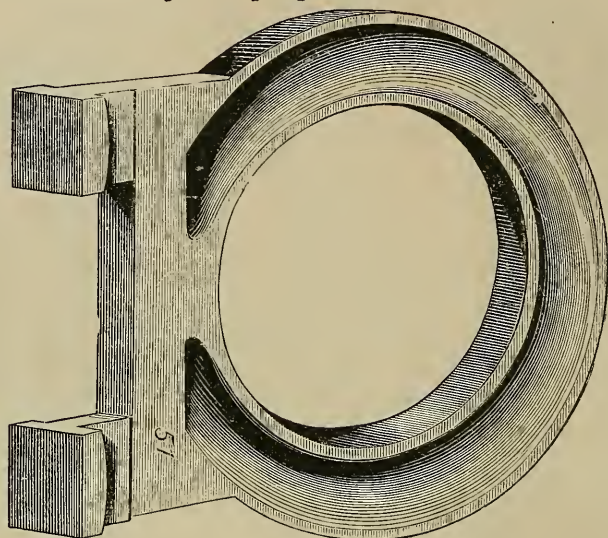
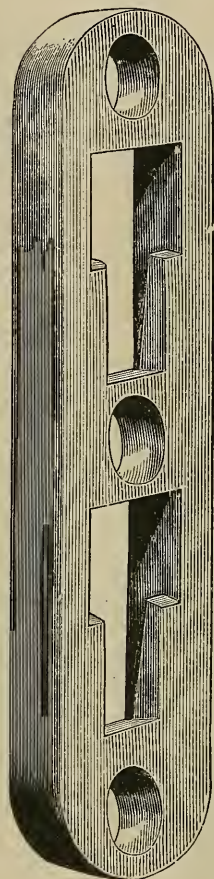
Same size Plate as No. 50, but the Rail Fastener lighter, making 100 sets cost only - - - \$6 80

There is an economy also in letting them in the groove, being routed nearer the end of rail, so that no cutting whatever is necessary, and the straight side of the bar and projecting teeth outside effectually prevent the Fastener turning in the groove. The same size Router, precisely, is used as for No. 50, and the Bedsteads will be interchangeable with those having No. 50 Fasteners.



## BEDSTEAD FASTENERS.

List Price, 5 cents per pound.

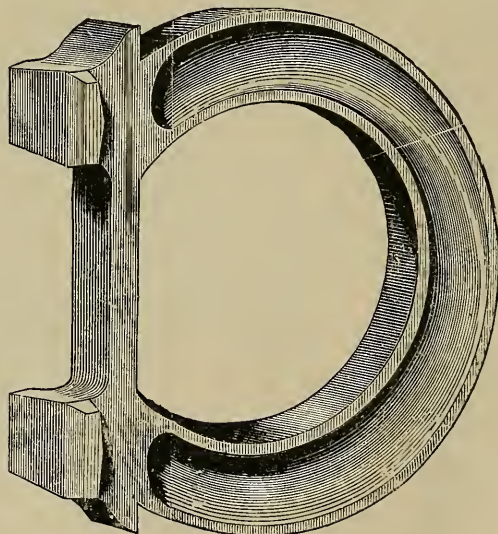


No. 51

Size of Plate,  $1\frac{1}{4}$  by  $4\frac{1}{2}$  inches, (same as No. 9, page 69.)  
 Weight per set, 2 pounds 5 ounces; per 100 sets, 228 pounds.

Cost per 100 sets, at 5 cents per pound, - - \$11 40

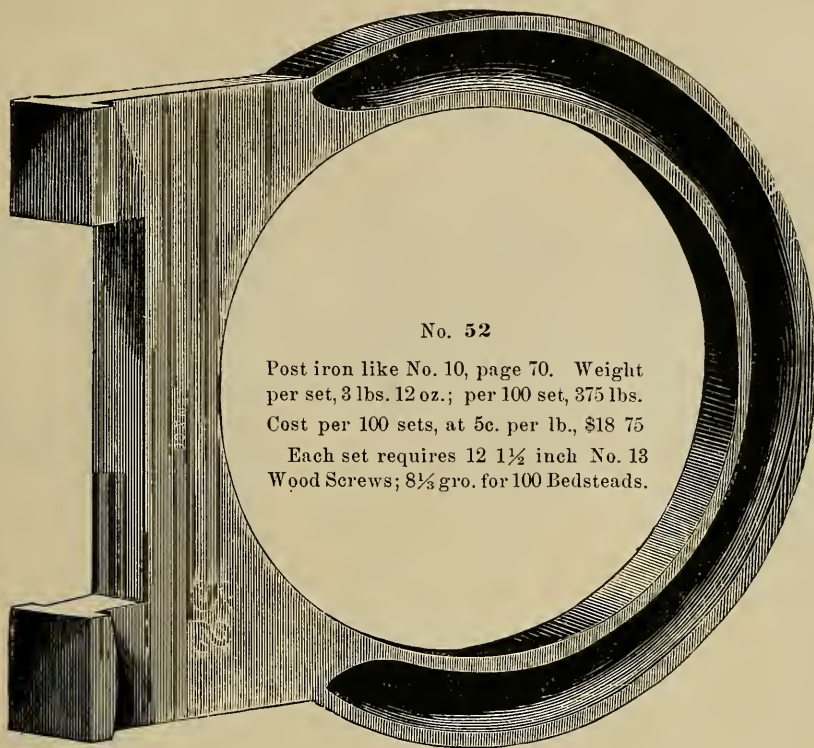
Require twelve  $1\frac{1}{2}$  inch No. 12 Wood Screws to a set.



No. 151

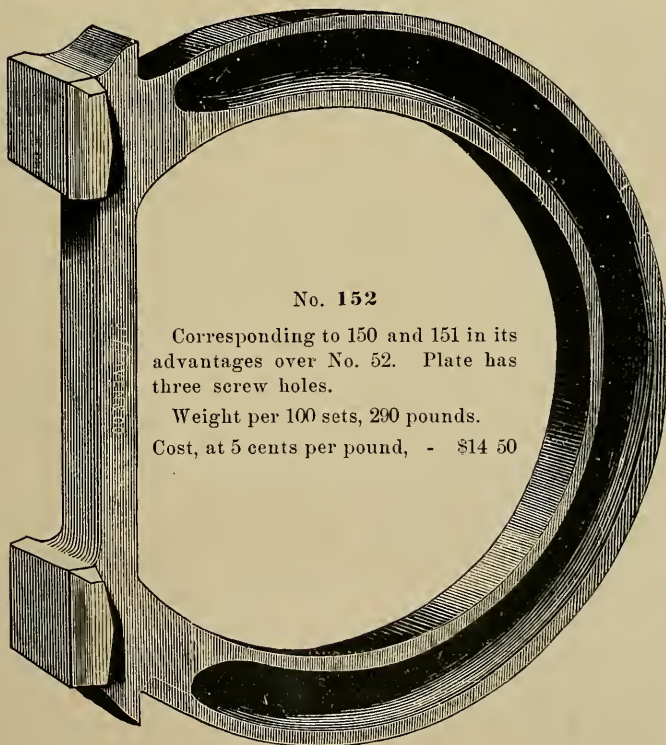
This has the same advantages over 51 that 150 has over 50. The Plates (Post Fasteners), however, are not identical, No. 151 having only two screw holes.

Weight per 100 sets, 185 pounds; cost, - - - - - \$9 25

**No. 52**

Post iron like No. 10, page 70. Weight  
per set, 3 lbs. 12 oz.; per 100 set, 375 lbs.  
Cost per 100 sets, at 5c. per lb., \$18 75

Each set requires 12 1½ inch No. 13  
Wood Screws; 8½ gro. for 100 Bedsteads.

**No. 152**

Corresponding to 150 and 151 in its  
advantages over No. 52. Plate has  
three screw holes.

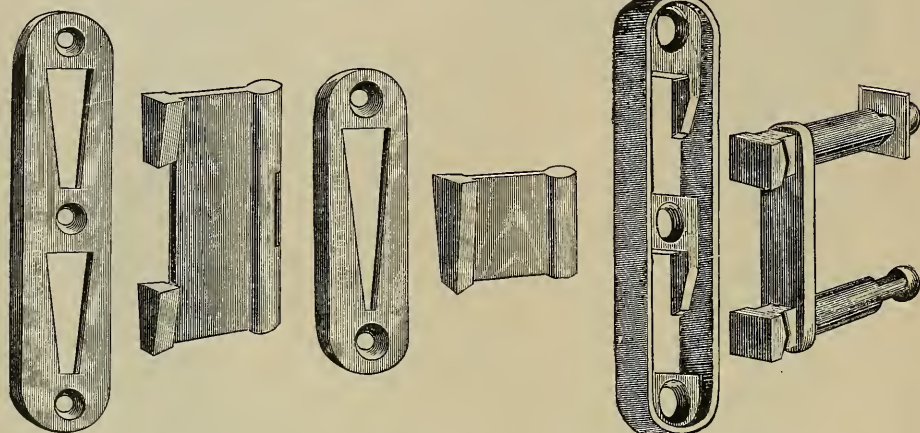
Weight per 100 sets, 290 pounds.

Cost, at 5 cents per pound, - \$14 50



# BEDSTEAD FASTENERS.

List Price, 5 cents per pound.



Nos. 1 &amp; 2

Nos. 3, 4 &amp; 5

Nos. 7 &amp; 8

No. 1,	Plate	$1\frac{1}{2}$ by $7\frac{5}{8}$ inches;	weight per set, 5 lbs. 6 oz.;	Screws, $1\frac{1}{2}$ inch, No. 14.
" 2	"	$1\frac{1}{4}$ by $5\frac{3}{4}$	" " 3 lbs. 2 oz.;	" $1\frac{1}{2}$ " " 12.
" 3	"	$1\frac{5}{8}$ by $4\frac{1}{2}$	" " 2 lbs. 7 oz.;	" $1\frac{1}{2}$ " " 14.
" 4	"	$1\frac{1}{4}$ by $4\frac{1}{8}$	" " 2 lbs.;	" $1\frac{1}{2}$ " " 13.
" 5	"	$1\frac{1}{8}$ by $3\frac{1}{2}$	" " 1 lb. 7 oz.;	" $1\frac{1}{2}$ " " 12.
" 7	"	$1\frac{1}{4}$ by 6	" " 3 lbs. 2 oz.;	" $1\frac{1}{2}$ " " 14.
" 8	"	$1\frac{1}{4}$ by $4\frac{5}{8}$	" " 2 lbs. 10 oz.;	" $1\frac{1}{2}$ " " 12.

**Malleable Keys for Nos. 7 & 8, 15 Cents per pound.**

Above and on the preceding pages we give illustrations of our old styles of Bed Fasteners, that are still in use, though fast being superceded by our "patent."

Of most of these we were the first and for a long time the only manufacturers, and later ones have copied as near as possible—to which we have no objections to make—it being desirable that all makes of a certain number should be interchangeable.

We have always taken the greatest care to have our castings perfect—each piece being fitted to a standard, so that all Fastenings fit each other.

On account of the extra pains we have taken to secure uniform good quality, we have charged more than others for them, and our customers have acknowledged the good policy of paying us the extra cost.

We have now decided, however, to reduce them to the price at which we sold to the trade before the war,

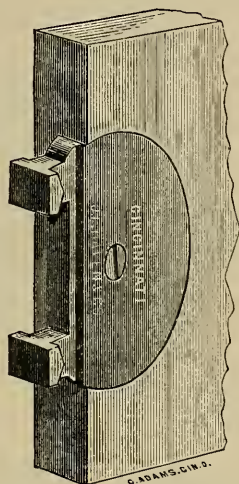
**FIVE CENTS A POUND,**

but will make no change in the quality; they will be as good as ever.

We have extended the cost of 100 sets of each sort, and the size and length of screw usually sold with them, for your convenience in ordering.

## NEW SERIES

# BEDSTEAD FASTENERS.



Nos. 70, 71, 72.

We give illustration of the first of a new series of Rail Irons, on which we are now (January, 1871,) engaged, and which will probably be for sale before this reaches the eye of the public.

We are confident that all who continue to use the Ring Fastener at all will see the advantage of changing to these.

No. 51, for instance, requires cutting out by hand for the reception of the neck part, and a block to be glued over to hold it in, and though No. 151 dispenses with the cutting, the same block is still required, the expense of which, it is true, is not much, but the time spent glueing and nailing them on, and waiting for them to dry, renders the whole operation troublesome and costly in comparison with No. 71, which need only one  $\frac{1}{2}$  inch screw to hold them firmly. The routing of course is the same for either sort; the only expense being new bits, costing \$4.00.

It will be observed that the head is set back a trifle, bringing the bearings nearer the center of the rail and the casting entirely flush with its face, so that they can be packed solidly together for shipping — four rails with No. 71 Irons making a bundle at least 3 inches thinner than when No. 51 are used.

We now have the most perfect set of Bedstead Fasteners made in this country, samples of which, set in wood, we shall be pleased to furnish all applicants.

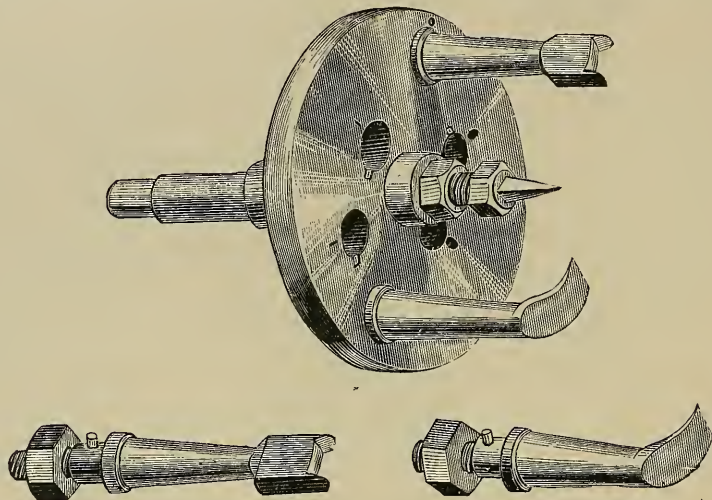
Our new styles are as far as possible made interchangeable with the old, so that mixing rails will cause no trouble.

Send a sample of what you are using, and let us see if we cannot induce you to save from ten to fifty cents on every Bedstead you make.

We have also some new and very small patterns, suitable for making furniture to "knock down," to save expense in shipping.

# BED FASTENER ROUTERS.

## PLATE AND CUTTERS FOR RING FASTENERS.



With two sets of Spurs and Cutters, for all sizes.

Shank made of any size to order, to fit any Boring Machine Mandrel, which can be readily adjusted to do the work.

Price, with two sets of Bits,	- - - - -	\$13 50
Spur or Bit separately, each	- - - - -	2 00

## ROUTER BITS.



No. 1

No. 2

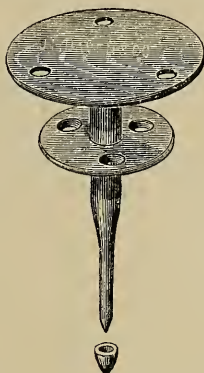
No. 1, for all sizes of Plates to order,	- - - - -	each, \$3 50
" 2, " " " " " " " "	- - - - -	" 1 50

Can be used profitably on a Boring Machine, with slight changes, or on a Mortising Machine with Boring Attachment.

The No. 2 is a new style, much cheaper and stronger than No. 1, and does the work fully as rapidly.

We also propose to manufacture a full assortment of Cutters for Friezing Machines, under Shannon & Haven's patent, which will cut as freely as the old style and very much smoother, and equally well right or left.

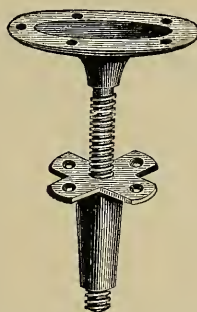
## STOOL PIVOTS.



No. 2

No. 2, for Office Stools, 9 inches long, - - - - per dozen, \$2 20

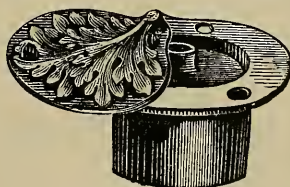
## CHAIR AND STOOL SCREWS.



## WROUGHT SCREWS.

No. 1,  $\frac{7}{8}$  inch iron, 8 inches long, to raise 4 inches, - - per dozen, \$4 00  
 " 2, 1 " " 8 " " 4 " - - " 4 50

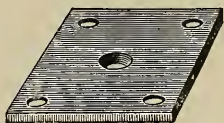
## INK STANDS—for School Desks.



Complete with Bottles, - - - - per dozen, \$3 00  
 Extra Bottles, if ordered, - - - - " 50

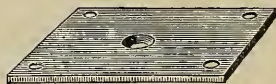


## CARD TABLE PLATES.



No. 17. SQUARE.

Weight of 100 pieces, 21 lbs.

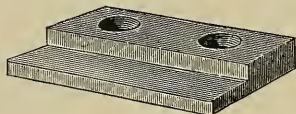


No. 18. OBLONG.

Weight of 100 pieces, 13½ lbs.

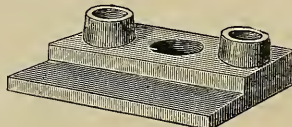
Price per pound, either pattern, - - - - - 5 cents.

## EXTENSION TABLE STOPS.



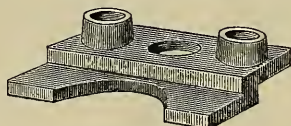
No. 19

Weight of 100, 15 lbs.



No. 20

Weight of 100, 15 lbs.



No. 21

Weight of 100, 12 lbs.

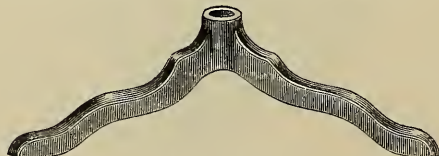
Price per pound, either pattern, - - - - - 5 cents.

## WARDROBE SCREWS.



Complete, threaded, with Nut and Washer, - - - - - per 100, \$5 00

## TOWEL RACK FEET.



JAPANNED.

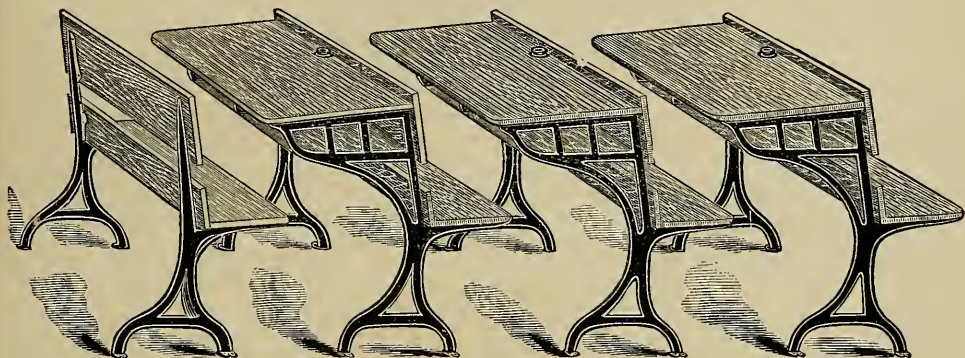
10½ inches long, 3½ inches high, weigh 1 lb. each, - - - - - 7 cents.

## SCHOOL DESK FRAMES.

We offer to the trade the following described Desk and Seat Frames, to which we propose to add other styles as soon as possible, of which we will furnish illustrations to all asking for them. They could not be made ready for this book.

All the castings are smooth and handsome, countersunk ready for the screws, and japanned with our best Hardware Baking Varnish.

### CINCINNATI PATTERN.



We still make great numbers of this old and favorite style, which has long been the standard in the Public Schools of Cincinnati—other more fancy sorts having been tried and found wanting in some of the requisites of a good Desk.

There are Desks of this style in the Cincinnati Public Schools which have been in use twenty years and are still good.

There is no pretense of ornamentation; they are perfectly plain and therefore never go out of fashion, but always look well.

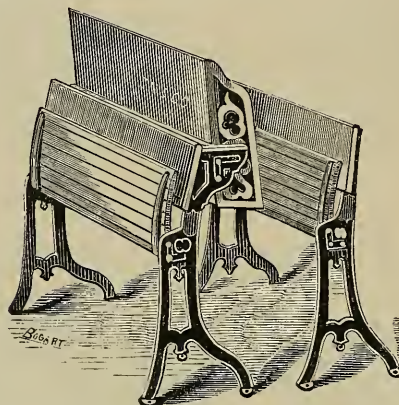
### DESCRIPTION AND PRICES.

	Nos.	00	0	1	2	3
Hight of finished Desk, - - - inches,		19½	21½	23¼	25¾	29
“ “ Seat, - - - “		9½	11	12½	13¾	15¾
Weight of Castings for Desk & Seat, lbs. pair,		16½	17¼	18	21	23¾
“ “ “ Back Seat, “ “		10½	11	11½	12	14
Combined Desk and Seat Frames, per pair,		\$1 24	\$1 28	\$1 35	\$1 58	\$1 75
Back Seat Frames, - - - “		79	84	87	90	1 05

Each combined Desk and Seat requires the following Wood Screws:

Three ½ inch, No. 5; five 1¼ inch, No. 10; four 1½ inch, No. 10; eighteen ¾ inch, No. 11, and ten 1 inch, No. 11; and each Back Seat four 1½ inch, No. 10; twelve ¾ inch, No. 11, and eight 1 inch, No. 11.

## HAVEN'S PATENT FOLDING DESK AND SEAT FRAMES.



The above Folding Desks are designed and arranged to meet the requirements of having a Desk that may be made to occupy but a small space, enabling the room to be more readily and easily cleaned, adapting it for other purposes than a school, should occasion require.

The simple and efficient mode of construction is more effectual than any other Desks made, comprising all that is essential and useful.

Both Seat and Desk are hung on with a peculiar joint, by which the Desk drops vertically whilst turning, thus bringing it below the line of vision of the occupant of the seat behind (a serious fault with most tilting desks being that when up they obstruct the view), and require a lift to start them back, preventing them from being accidentally knocked down in passing; and when down are self-fastening, preventing all rattling by the scholars.

The Seats are curved, and when the Desks are turned up accommodate adults comfortably and conveniently.

We have only made as yet three sizes, for larger pupils, as follows:

### DESCRIPTION AND PRICES.

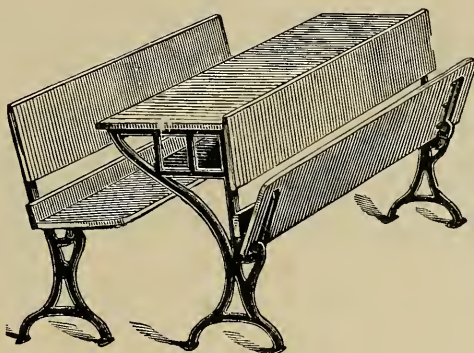
	Nos.	11	12	13
Hight of finished Desk, - - - - - inches,		23 $\frac{1}{4}$	25 $\frac{3}{4}$	29
" " Seat, - - - - - "		12 $\frac{1}{8}$	13 $\frac{3}{4}$	15 $\frac{3}{4}$
Weight of Castings for comb'd Desk and Seat, lbs. per pair,		20	24	27 $\frac{1}{2}$
" " " Back Seat, - - - - - "		14	15 $\frac{1}{2}$	19
Combined Desk and Seat Frames, - - - - - "		\$1 60	\$1 92	\$2 20
Back Seat Frames, - - - - - "		1 12	1 24	1 52

Each combined Desk and Seat requires the following Wood Screws:

Three  $\frac{1}{2}$  inch, No. 5; three 1 inch, No. 8; three  $1\frac{1}{4}$  inch, No. 10; fourteen  $\frac{7}{8}$  inch, No. 11, and nine 1 inch, No. 11; and each Back Seat requires twelve  $\frac{7}{8}$  inch, No. 11, and eight 1 inch, No. 11.



## FOLDING SEAT DESK FRAMES.



The Seats fold up as shown, leaving a passage between the Desks of about twelve inches, giving sufficient room for sweeping, but hardly enough for the convenience of grown persons, if it is desired to use the room for lectures, &c.

The arm is cushioned with rubber, making little or no noise in dropping, and we furnish curved arm pieces, if curved slatted Seats are preferred.

The additional cost over fixed seats is so slight (the wood-work being identical), that they should be used in preference to them.

### DESCRIPTION AND PRICES.

	Nos.	200	20	21	22	23
Hight of finished Desk, - - inches,		19½	21½	23¼	25¾	29
“ “ Seat, - - - “		9½	11	12⅛	13¾	15¾
Weight of Castings for Desk & Seat, lbs. pair,		17¾	19	19¾	23	25
“ “ “ Back Seat, “ “		10½	11	11½	13	15
Combined Desk and Seat Frames, per pair,		\$1 42	\$1 52	\$1 58	\$1 84	\$2 00
Back Seat Frames, - - - “		85	88	92	1 04	1 20

Each combined Desk and Seat requires the following Wood Screws:

Three ½ inch, No. 5; five 1¼ inch, No. 10; eighteen ⅞ inch, No. 11, and ten 1 inch, No. 11; and each Back Seat requires twelve ⅞ inch, No. 11, and eight 1 inch, No. 11.

We have given in this book only the prices of Desk Frames, but are prepared to furnish them complete, as represented, and our Hardware friends would oblige us and make a profit for themselves by paying a little attention to supplying the schools in their own neighborhoods.

The wood-work is manufactured for us by

**THOMAS KELSALL & SON,**  
No. 171, 173, 175 & 177 West Second Street,  
CINCINNATI, O.

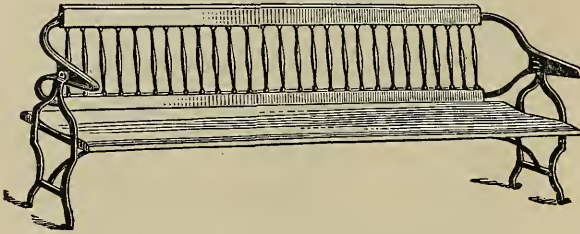
The oldest manufacturers of School Furniture in this city, if not in the West, and is warranted satisfactory in all cases.

Every growing community requires more school accommodations every year, and a little attention on your part would secure the trade.

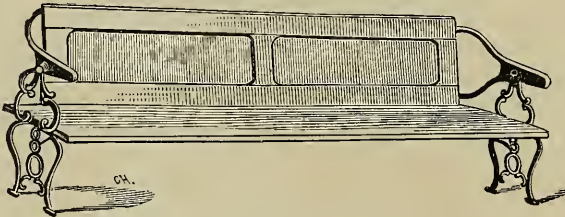


# IRON FRAMES FOR CHURCH AND HALL SEATS.

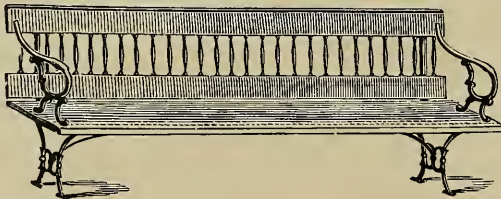
No. 30. REVERSIBLE. Style A.



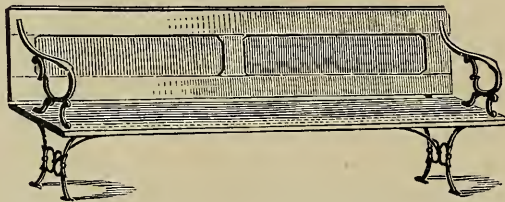
No. 31. REVERSIBLE. Style B.



No. 32. STATIONARY. Style A.



No. 33. STATIONARY. Style B.



Above we show four ways of making up three styles of castings.

The backs can of course be made still cheaper, plain, and even then they make handsome, cheap and very durable seats.

Castings for No. 30	weigh 26 pounds,	-	-	-	-	-	per set, \$1 95
" " " 31	" 30	"	-	-	-	-	" 2 25
" " " 32 and 33	weigh 40 pounds,	-	-	-	-	-	" 3 00

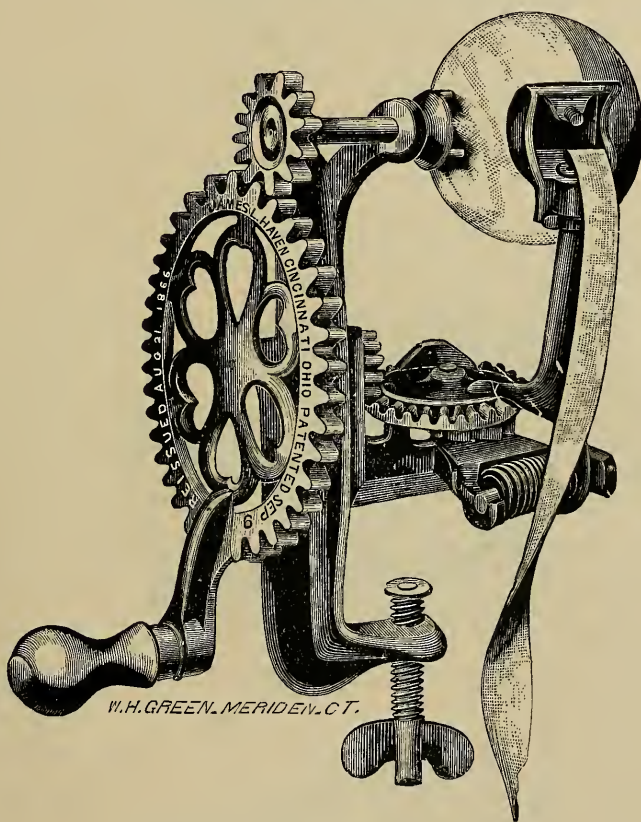
Japanned with best Hardware Baking Varnish, countersunk ready to screw on the woods.

We will, on application, furnish specifications for the wood-work, so that there need be no delay in getting it out in advance of the receipt of the castings.

# HOUSE-FURNISHING HARDWARE.

GOLD MEDAL

APPLE PARERS.



JAS. L. HAVEN & CO.'S PATENT.

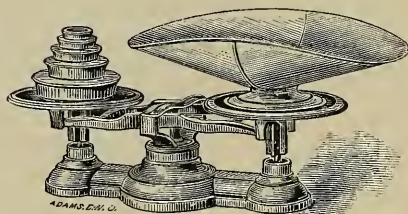
List price, - - - - - per dozen, \$9 00

Warranted to pare any fruit as well and as rapidly as any other Parer.

We sell Parers at the same price of similar goods in New York.

# HATCH'S BALANCES.

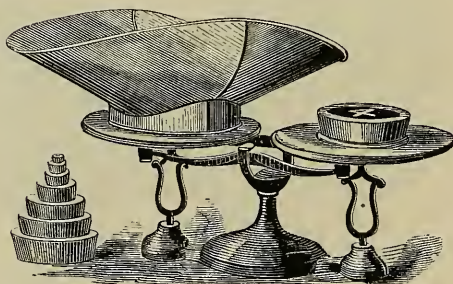
## TEA SCALES.



**Weigh Half Ounce to Four Pounds.**

Packed 3 in a case, (nest of weights,  $\frac{1}{2}$  oz. to 2 lbs.,) - - per dozen, \$14 00

## COUNTER SCALES.



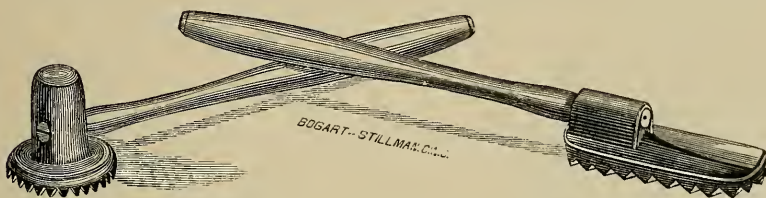
**Weigh Half Ounce to 8 Pounds.**

Packed one in a box, (nest of weights,  $\frac{1}{2}$  oz. to 4 lbs.,) - - each, \$3 00

## ADJUSTED WEIGHTS.

$\frac{1}{2}$ ounce to 1 pound,	-	-	-	-	-	-	-	-	per nest, 30 cents.
$\frac{1}{2}$ " " 2 "	-	-	-	-	-	-	-	-	" 50 "
$\frac{1}{2}$ " " 4 "	-	-	-	-	-	-	-	-	" 90 "
$\frac{1}{2}$ oz.	1 oz.	2 oz.	4 oz.	8 oz.	1 lb.	2 lb.	4 lb.	10 lb.	
Each, 2	3	5	6 $\frac{1}{4}$	10	15	30	60	125 cents.	

## BEEF POUNDERS.



No. 2

No. 1

No. 2, - - per dozen, \$2 40

No. 1, - - per dozen, \$2 40

## BED KEYS.



No. 1

Malleable, - - - - - per dozen, \$2 00

Common Cast, - - - - - " 1 25

## BOOT JACKS.



No. 1



No. 3

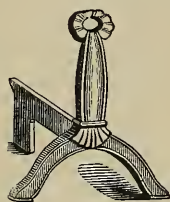
						JAPANNED.	BRONZED.
No. 1, Boots	Pattern,	-	-	-	-	per dozen, \$2 50	3 00
" 2, Wrench	"	-	-	-	-	" 1 75	2 00
" 3, Armadillo	"	-	-	-	-	" 2 50	3 00



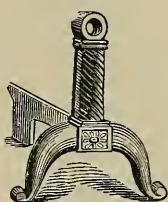
# DOG IRONS.

All patterns, - - - - - per pound,  $4\frac{1}{2}$  cents.

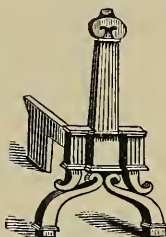
In ordering, please specify the sorts wanted, **BY THE NUMBERS.**



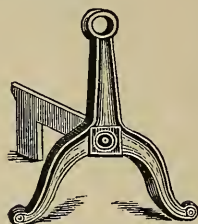
No. 1  
13 lbs. per pair.



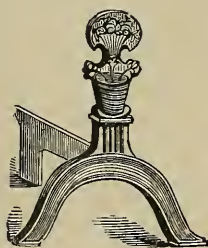
No. 2  
16 lbs. per pair.



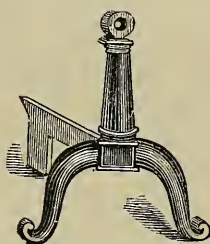
No. 3  
19 lbs. per pair.



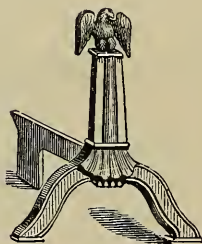
Nos. 4 and 5  
No. 4, 23 lbs. per pair.  
" 5, 27 " "



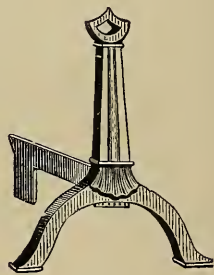
No. 6  
27 lbs. per pair.



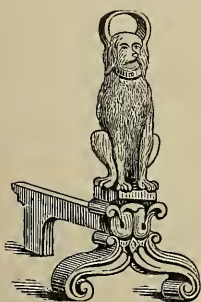
No. 7  
28 lbs. per pair.



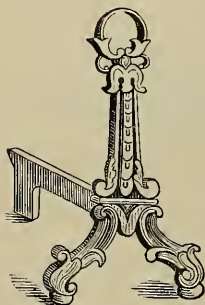
No. 8  
28 lbs. per pair.



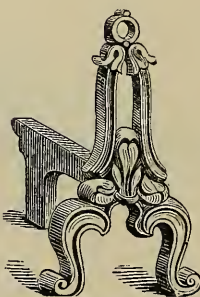
No. 9  
30 lbs. per pair.



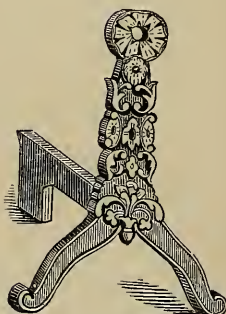
No. 10  
33 lbs. per pair.



No. 11  
40 lbs. per pair.

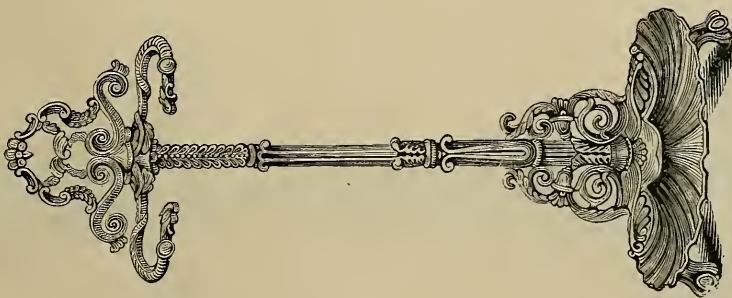


No. 12  
46 lbs. per pair.



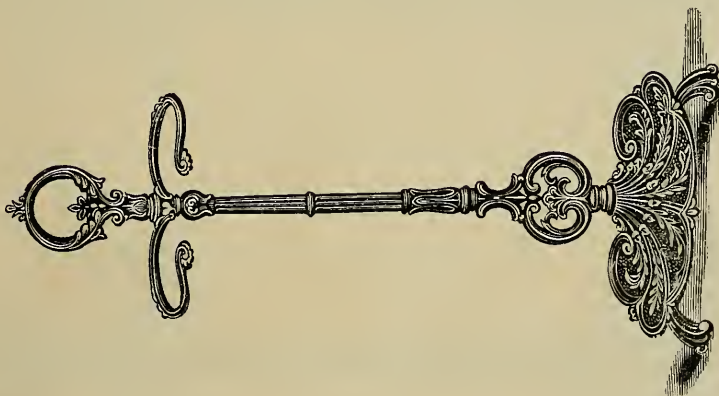
No. 13  
46 lbs. per pair.

## BRONZED FIRE SET STANDS.



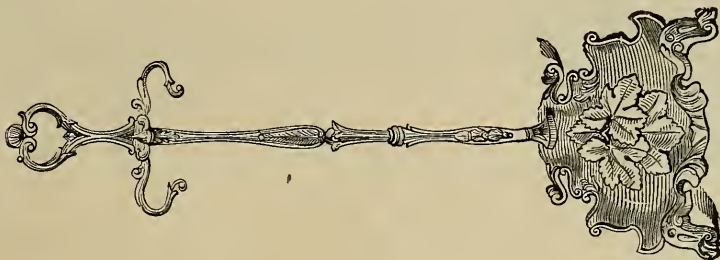
No. 1

Japanned, \$15 00 per dozen.  
Bronzed, 18 00 “



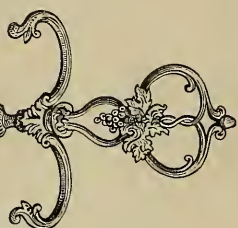
No. 2

Japanned, \$11 00 per dozen.  
Bronzed, 13 50 “



No. 20

Japanned, \$10 00 per dozen.  
Bronzed, 12 00 “



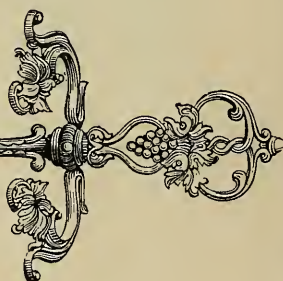
No. 5

Japanned, \$17 00 per dozen.  
Bronzed, 20 00 "



No. 6

Japanned, \$17 00 per dozen.  
Bronzed, 20 00 "



No. 7

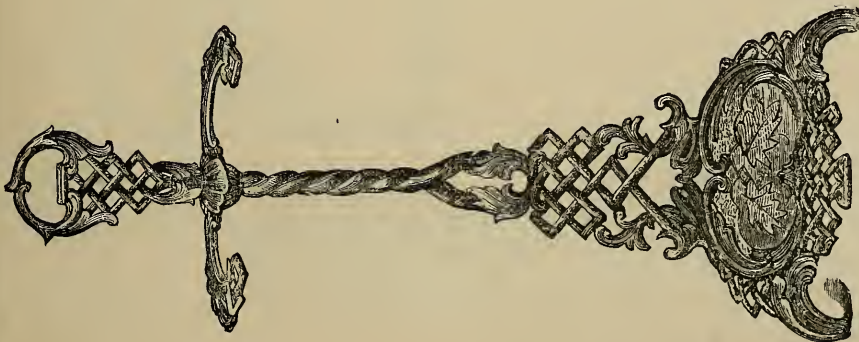
Japanned, \$17 00 per dozen.  
Bronzed, 20 00 "



No. 9

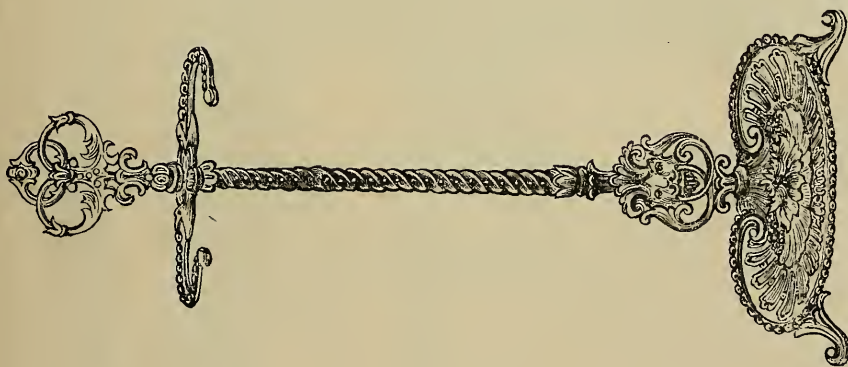
Japanned, \$17 00 per dozen.  
Bronzed, 20 00 "





No. 10

Japanned, \$17 00 per dozen.  
Bronzed, 20 00 "



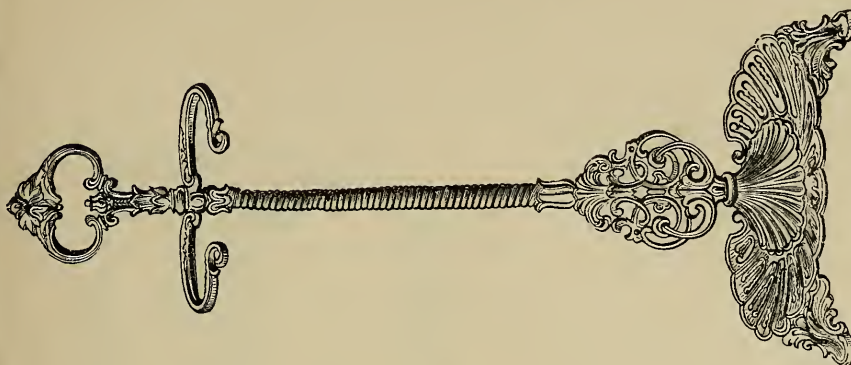
No. 11

Japanned, \$15 00 per dozen.  
Bronzed, 18 00 "



No. 12

Japanned, \$15 00 per dozen.  
Bronzed, 18 00 "

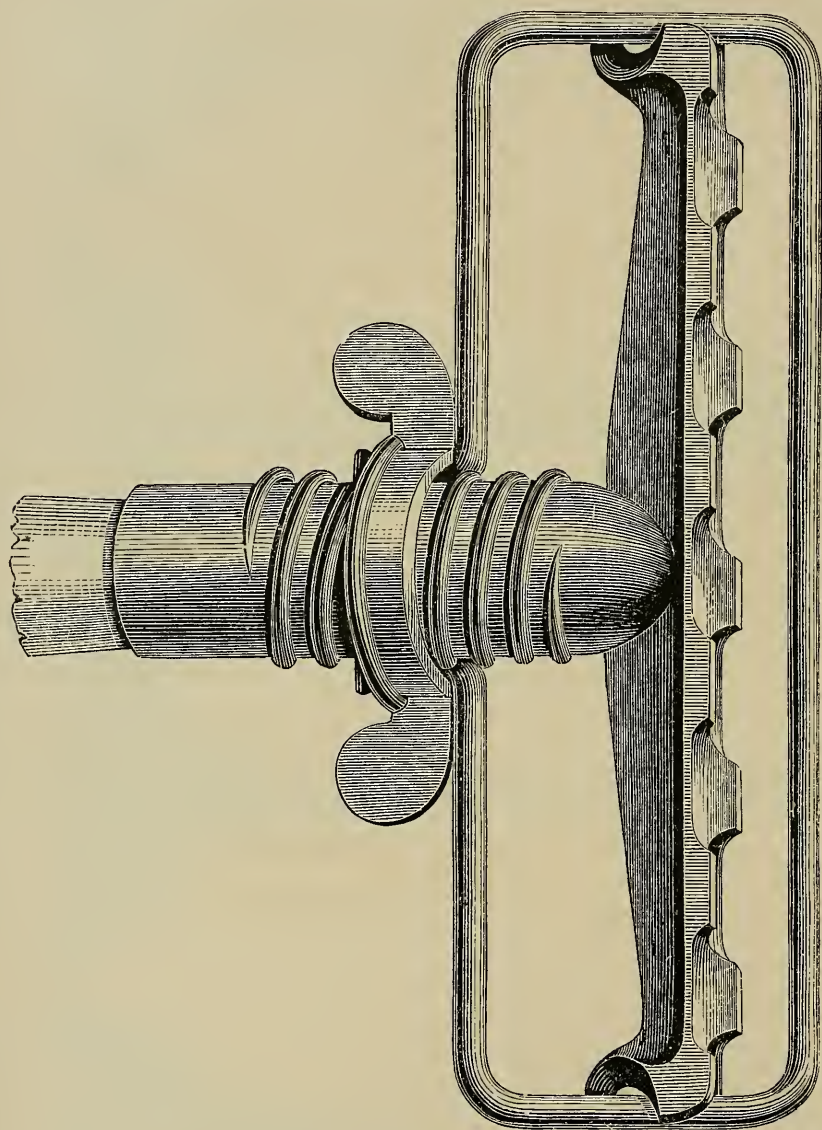


No. 13

Japanned, \$15 00 per dozen.  
Bronzed, 18 00 "



JAMES L. HAVEN & COMPANY'S  
 PATENT CORRUGATED MOP STICKS.



Handled, - - - - - per dozen, \$3 00

Packed 12 dozen in a case without charge, when a full case is taken.

In style, finish, and durability these are at least equal to any in the market.

The corrugations hold the cloth firmly with much less pressure than when cast smooth.

## WROUGHT FIRE SHOVELS AND POKERS.

## Wooden Handles — Deep Pattern.



Nos. 1                      2  
       9                      10½ inch handles.  
       \$14 00                15 00 per gross.

## Short Flat Handles — Deep Pattern.



Nos. 1                      2  
       7½                    9 inch handles.  
       \$13 50                16 00 per gross.

## Long Round Handles — Deep Pattern.



Nos. 2	3	4	5
14	16	17½	22 inch handles.
\$21 00	25 50	30 00	42 00 per gross.



## STRAIGHT ENDS.

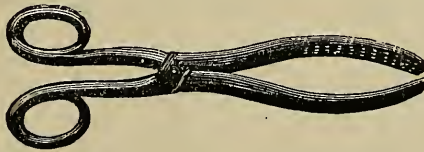
Nos. 1	2
19	22½ inches long.
\$0 75	1 00 per dozen.



## BENT ENDS.

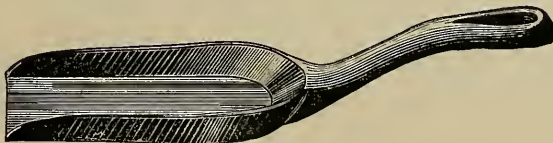
No. 3
20 inches long.
\$1 50 per dozen.

## COAL TONGS.



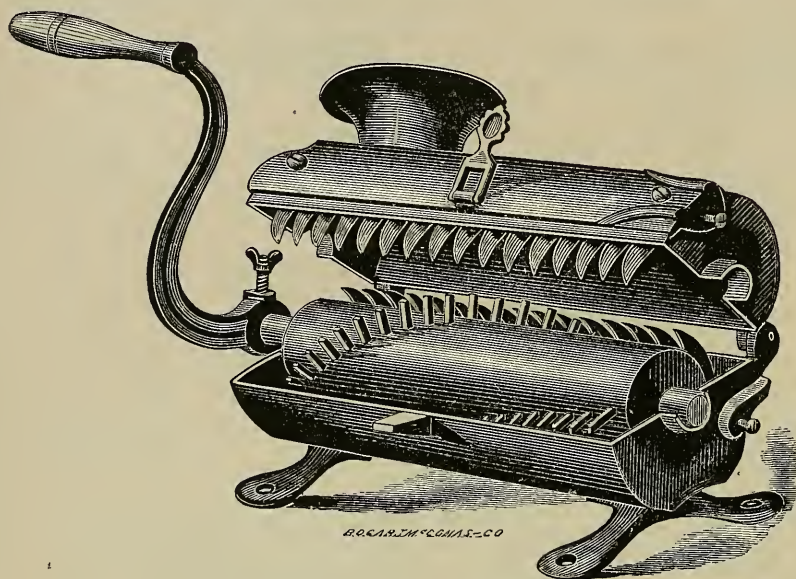
Malleable, Japanned, - - - - - per dozen, \$2 50

## CAST COAL SCOOPS.



Japanned, iron handle, - - - - - per dozen, \$1 50

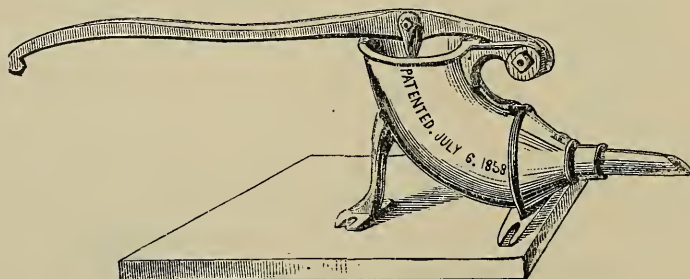
## HAVEN'S PATENT SAUSAGE MEAT CUTTERS.



	No. 1, 16 Knives.	No. 2, 20 Knives.	No. 3, 24 Knives.	No. 4, 32 Knives.
Per dozen, -	\$17 00	19 00	22 00	32 00
	Packed 6 in a case.	6 in a case.	6 in a case.	4 in a case.

We have a most perfect arrangement for taking out the knives for cleaning or sharpening. By loosening three screws, the cap slides a trifle endwise, and every knife can be taken out and replaced in a few minutes. The crank is also fixed by a set screw, and can be put on or taken off at pleasure. The knives are all alike, and can be replaced when worn out, either by us or almost any mechanic who can work steel.

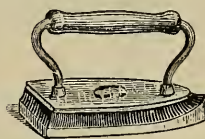
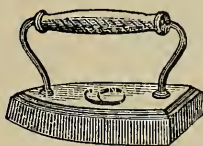
## PERRY'S SAUSAGE STUFFERS.



	Nos.	1	0
		3½ in. diam.	5 in. diam.
Per dozen, -	-	\$13 00	18 00
	-	Packed six in a case.	

## SAD IRONS.

Planed Faces — Extra Polished.



Per pound, - - - - - 5½ cents.

We have greatly improved the quality of our Sads, planing them perfectly true on the face, instead of grinding them. We sell only the perfect ones; all finely polished, japanned, each one papered singly, and packed in 100 or 200 pound cases, (unless ordered to be packed in casks,) assorted as follows—half round, half sharp points:

	Nos. 5	6	7	8	9
200 pound case contains, - - - - -	4	8	12	9	4 pieces.
100 " " " " - - - - -	2	4	6	4	2 "

The Irons weigh about 10 per cent less than marked, on the average; for example, a 100 pound case by the numbers amounts to 126 pounds, whilst the actual weight is about 113 pounds.

## TAILORS' IRONS.

Finely Finished.



Per pound, - - - - - 6½ cents.

	Nos. 0	1	2	3	4	5
Weight, 8	10	13	16	19	21 pounds each.	

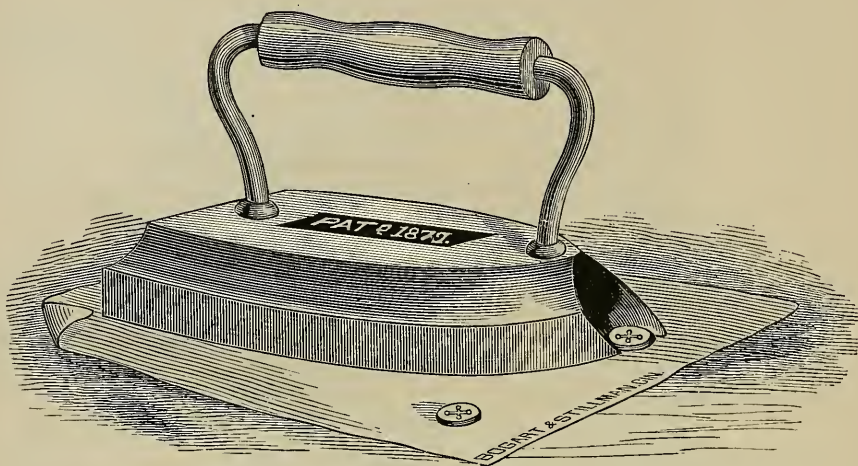
## ADAMS' PATENT

## CHARCOAL SAD AND TAILORS' IRONS.

No. 1, Tailors' size, double flue, - - - - -	per dozen, \$46 00
" 2, " " " " " " - - - - -	" 50 00
" 3, Laundry " " " " " " - - - - -	" 20 00



## PATENT SAD IRON.



Price, per pound, - - - - - 6½ cents.

We desire to call especial attention of dealers to our new Patent Sad Iron. With this improved Sad Iron, which is equally as well adapted to all ordinary purposes as the common, the operator can iron around buttons with about the same ease as any other part of the garment; never breaking them off, which is often a very great annoyance.

A slot with an arched wall is made in the point of the iron into which the button is run; a slight turn of the iron doing the work readily and without further trouble.

## SAD IRON STANDS.



No. 1, per dozen, 75c.



No. 2, per dozen, 75c.



No. 3, per dozen, 50c.

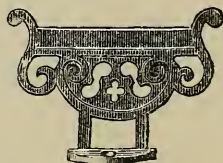
## COFFEE POT STANDS.



Japanned, - - per dozen, \$1 00      Bronzed, - - per dozen, \$1 50

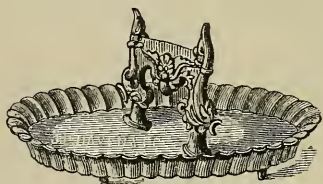


## FOOT SCRAPERS.



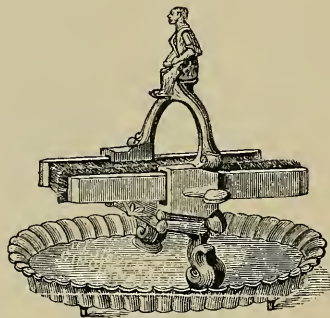
No. 1

No. 1, for wood, Japanned,	- - - - -	per dozen, \$1 87
" 2, for stone, " "	- - - - -	" 1 87



SCRAPER WITH DISH.

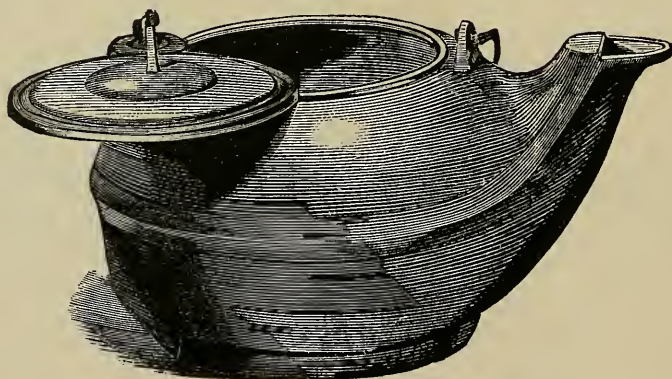
No. 1, Japanned,	-	per dozen, \$11 20
" 2, Bronzed,	- - "	13 00



WITH DISH AND BRUSHES.

Bronzed,	- -	per dozen, \$36 00
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## TEA KETTLES



FOR STOVES.

	6	7	8	9 inch.
Slide Lid (like cut), - - -	\$7 00	8 00	9 00	10 00 per dozen.
Loose " - - - -	6 00	7 00	8 00	9 00 " "

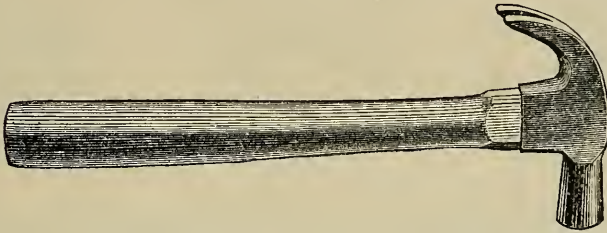
FLAT BOTTOM.

4 quart.
\$5 50

5 quart.
6 00

6 quart.
7 00 per dozen.

## NAIL HAMMERS.



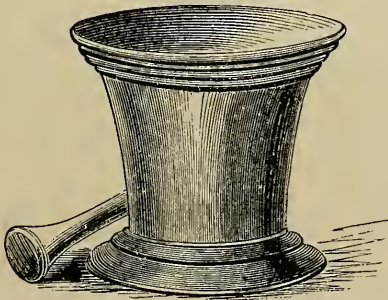
No. 1, Common, handled, - - - per dozen, \$1 80  
 " 2, Adze Eye (like cut), handled, - " 2 25

## TACK HAMMERS.



No. 1, - - - per dozen, \$1 00  
 " 2, - - - " 1 50

## IRON MORTARS AND PESTLES.

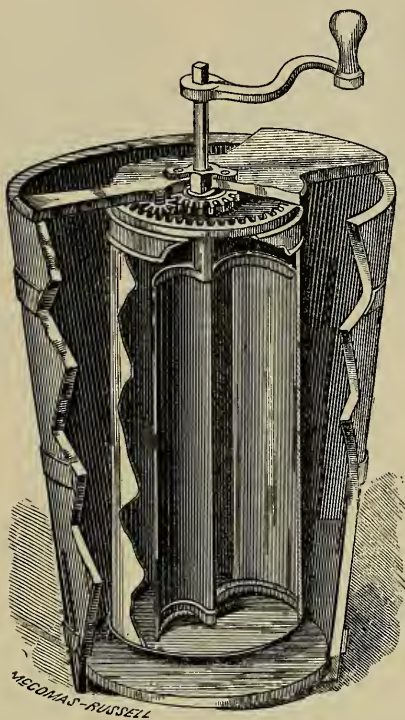


Nos.	Hight.	Diameter of Mouth.	Mortar and Pestle.	Pestles only.
1, 1 pint, - -	4½ inch,	5¾ inch,	\$0 70 each.	\$0 20
2, 2 " -	5½ "	6¾ "	1 10 "	0 25
3, 2 quarts, -	6½ "	8 "	1 55 "	0 30
4, 3 " -	7½ "	9 "	2 40 "	0 40
5, 6 " - -	10 "	11 "	4 75 "	1 00
6, 12 " -	12 "	13½ "	8 25 "	1 50
7, 32 " - -	22 "	19 "	18 75 "	2 25





# GOOCH'S I-X-L ICE CREAM FREEZERS.



## PRICE LIST OF GOOCH'S I-X-L ICE CREAM FREEZERS.

Sizes for Family Use.						Sizes for Confectioners or Hotels.					
2	3	4	6	8	10 Quarts.	3	4	5	6	8	10 Gallons.
\$4	\$5	\$6	\$8	\$10	\$12 each.	\$15	\$18	\$20	\$23	\$26	\$30 each.

A person entirely unskilled (the materials to be frozen being prepared,) can make good Ice Cream or Water Ices with this Freezer, as all that is required is to turn the crank to complete the operation.

The blade of the dash, which reaches to the side of the can, by forcing the cream away from the can, and to the center, leaves an unoccupied space behind the blade, which allows a column of air to penetrate the entire depth of the can, which is in turn constantly forced into the cream by the revolution of the center blade, thus causing the cream to rise light, as it should, and produce as much bulk of Ice Cream for the same amount of materials as if whipped by hand.

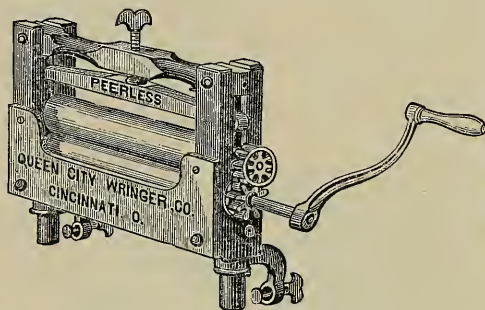
They require little over one-half the usual amount of ice.

They freeze Cream or Water Ices in a remarkably short space of time.

They are made of the best materials, and very substantial.

All the metal parts and hoops of tubs are well galvanized to secure against rust.

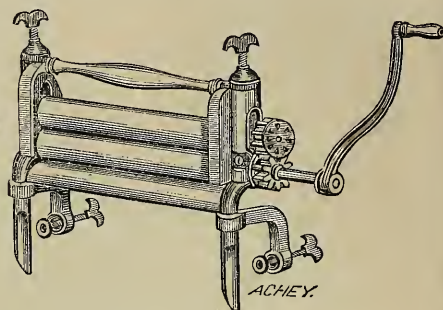
# CLOTHES WRINGERS.



## "PEERLESS."

### Wooden Frame.

Is made *simply and substantially* of thoroughly seasoned and selected maple, all iron parts being galvanized, and the journals all working in iron boxes.



## "TIP-TOP."

### Iron Frame.

Has a heavy substantial frame of the best grade of iron, every part being perfectly galvanized in order to prevent rusting.

### Wooden or Iron Frames at same Prices.

The Moulton Indestructible Roll is used in the Tip-Top and Peerless Wringers, which cost more than the ordinary wringer rolls.

They can not be broken by fair usage, nor get out of repair, as too many Wringers do, which is especially an object to purchasers residing at a distance from the manufacturers, where repairs can not be conveniently made.

They have the most simple and substantial attachment for fastening to the wash tub, and will fasten as well on any kind of washing machine, either square or round, and can be adjusted more easily and quicker than any other.

The thumb screws adjust instantly, the pressure on the springs allowing more space when the larger articles are to be wrung, while for the ordinary work they are as truly self-adjusting as any of the so called Self-Adjusting Wringers.

By turning the thumb screws the pressure is taken off the rolls when not in use, while in the "self-adjuster" the constant and heavy pressure being the same whether in use or not, the sides of the rolls become flattened, and the elasticity is taken out of the rubber, causing the rolls to burst or twist off.

### RETAIL PRICES.

#### WITH COGS.

No. 1, 10 by $1\frac{3}{4}$ inch Roll, each,	\$8 50
" 2, 10 by $1\frac{7}{8}$ " " "	9 00
" 3, 11 by $1\frac{7}{8}$ " " "	10 00

#### WITHOUT COGS.

No. 1, 10 by $1\frac{3}{4}$ inch Roll, each,	\$7 50
" 2, 10 by $1\frac{7}{8}$ " " "	8 00

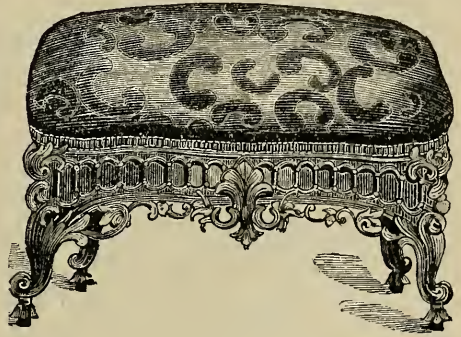
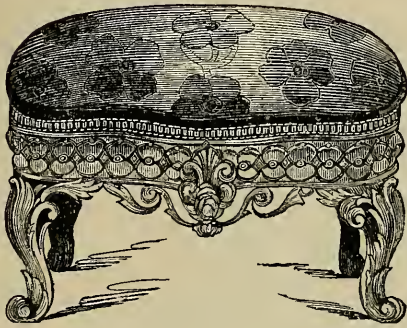
### HOTEL WRINGERS.

No. 4, 14 by $2\frac{1}{4}$ inch Roll, with cogs,	- - - - -	each, \$18 00
" 5, 16 by $2\frac{1}{2}$ " " " "	- - - - -	" 24 00
" 6, 17 by $3\frac{1}{4}$ " " " pulley (power),	- - - - -	" 50 00

(The No. 6 is made to be bolted to the tub or box with which it is used.)

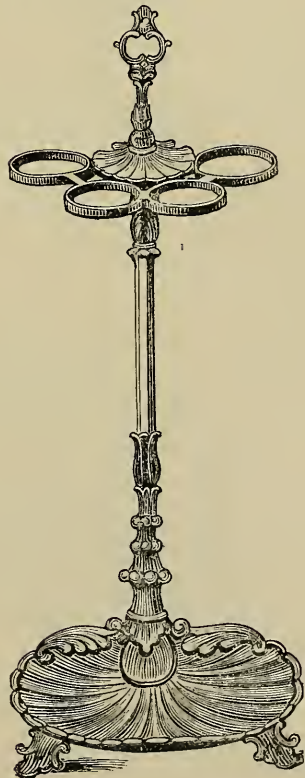
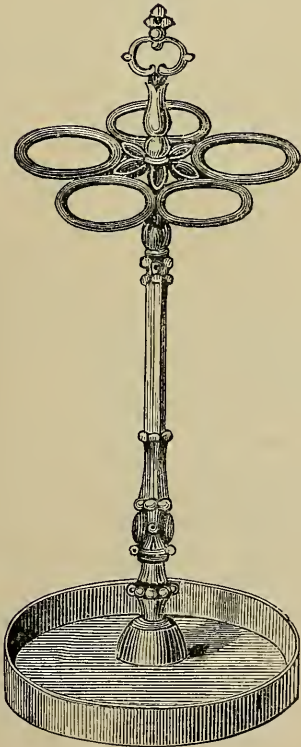


## OTTOMANS.



No. 1, Hair Cloth Seats, each, \$3 50	No. 2, Hair Cloth Seats, each, \$6 00
" 1, Plush Seats, - - " 6 00	" 2, Plush Seats, - - " 9 00

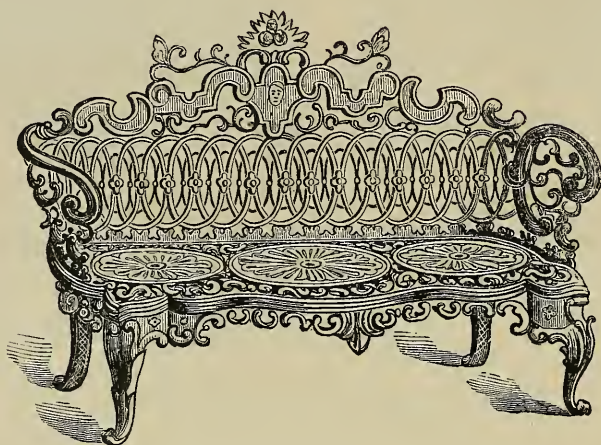
## UMBRELLA STANDS.



No. 1, Bronzed, - - each, \$2 00	No. 2, Bronzed, - - each, \$2 00
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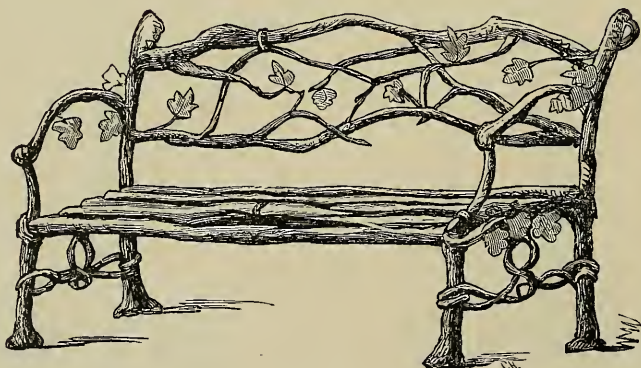


# IRON GARDEN AND LAWN SEATS.



No. 1

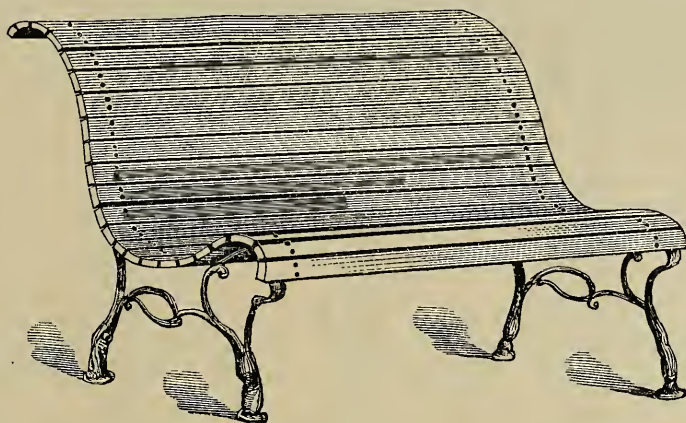
Bronzed, 5 feet long, - - - - - each, \$18 00



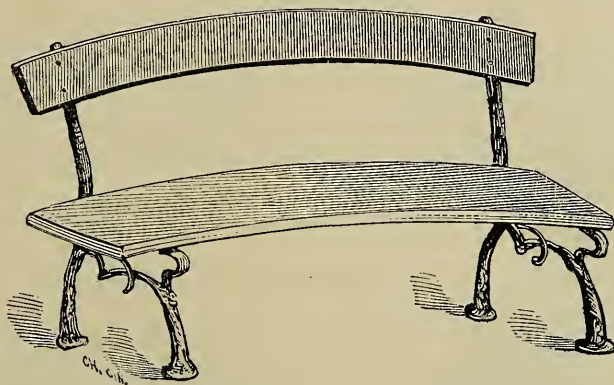
No. 2

Bronzed, 4 feet long, - - - - - each, \$12 00  
 " with Wood Seat, 4 feet long, - - - - - " 11 00

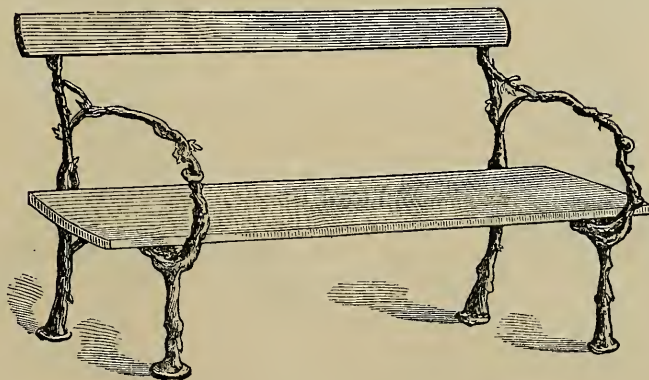
## IRON GARDEN AND LAWN SEATS.



No. 3, Scroll pattern, 4 feet 8 inches long, - - - - each, \$10 00

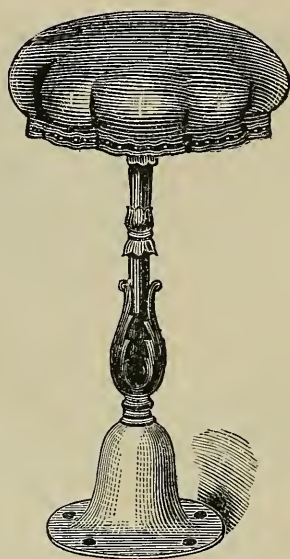


No. 4, Wood Seat and Back, 5 feet 4 inches long, - - - - each, \$6 00



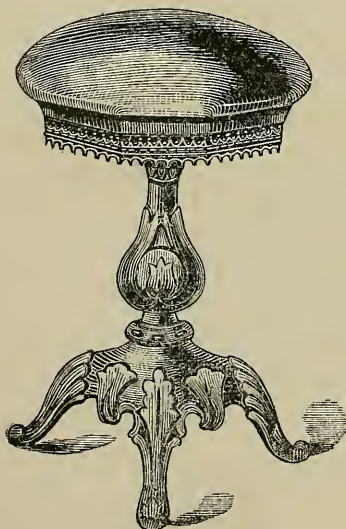
No. 5, Wood Seat and Back, 4 feet 8 inches long, - - - - each, \$7 00

## STORE STOOLS, with Revolving Seats.

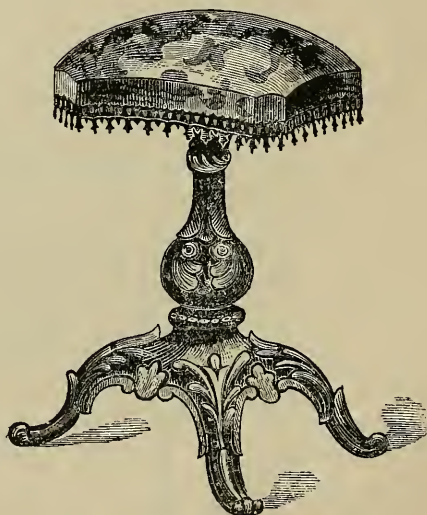


	Hair Cloth	Reps.	Enameled Cloth.	Plain Plush
No. 1, Cushions as per cut, - - - each,	\$2 75	3 00	2 75	4 50
" 2, Round Cushions, - - - "	2 50	2 75	2 50	4 00

## PIANO STOOLS.



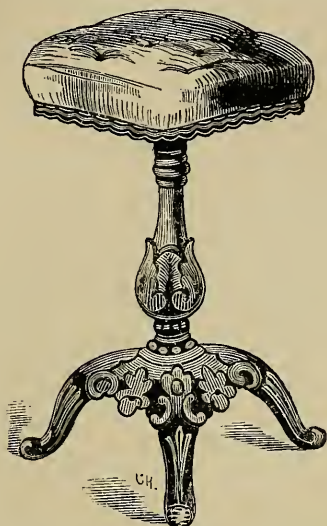
No. 1. SPRING CUSHIONS.



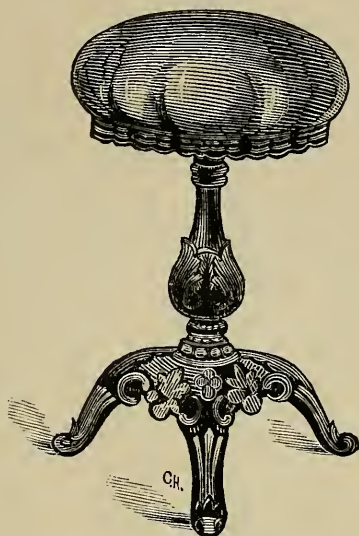
No. 2. SPRING CUSHIONS.



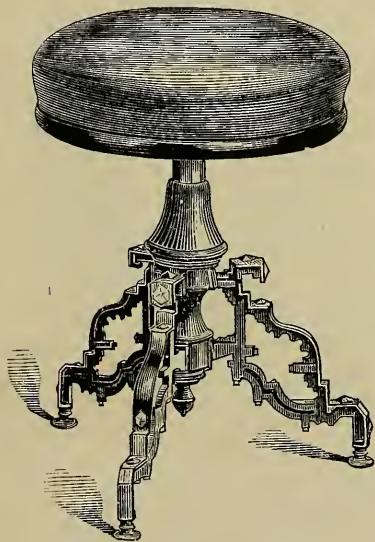
## PIANO STOOLS.



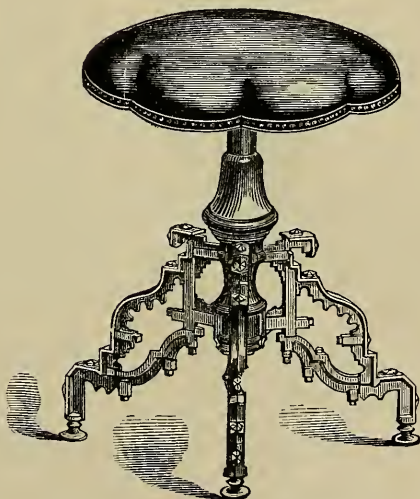
No. 3. WITHOUT SPRINGS.



No. 4. WITHOUT SPRINGS.



No. 6. WITHOUT SPRINGS.



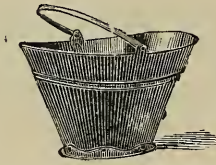
No. 7. WITHOUT SPRINGS.

No. 8. Same Frame as No. 7; Seat like No. 3.

		Hair Cloth.	Reps.	Worsted Plush.	Silk Plush.	Broca- telle.
No. 1,	- - - - - each,	\$4 50	5 35	5 50	6 40	7 35
" 2,	- - - - - "	5 60	6 50	- -	7 60	8 35
" 3,	- - - - - "	3 50	3 65	4 50	5 00	- -
" 4,	- - - - - "	3 50	3 65	4 50	5 00	- -
" 6,	- - - - - "	3 50	3 50	4 50	5 00	- -
" 7,	- - - - - "	3 00	3 00	4 00	4 50	- -
" 8,	- - - - - "	3 00	3 00	4 00	4 50	- -



COAL BUCKETS.



PATENT CAST BOTTOM.

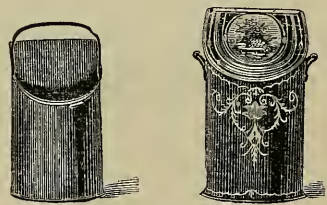
		16	18 inch.
Plain,	- - - - -	per dozen, \$8 00	9 00
Gold Band,	- - - - -	" 9 00	10 00
Galvanized,	- - - - -	" 12 00	13 00
Square Lipped, Plain,	- - - - -	" 10 00	11 00
" " Gold Band,	- - - - -	" 11 00	12 00
" " Galvanized,	- - - - -	" 13 00	14 00

HELMET TOP HODS.



Landscape,	-	per dozen, \$24 00
Bouquet,	- -	" 21 00
Gold Band,	-	" 19 00

COAL VASES.



Landscape,	- - -	each, \$4 50
Bouquet,	- - -	" 4 00
Gold Band,	- - -	" 3 50

WELL BUCKETS.



Light,	- - - - -	per dozen, \$4 75
Medium,	- - - - -	" 6 00
Light Swivel,	- - - - -	" 6 50
Heavy "	- - - - -	" 7 25

## PATENT SELF-OPERATING SWING.



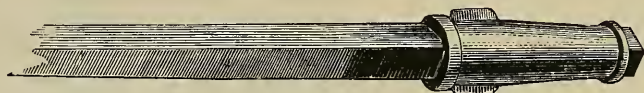
These Swings are suitable for Parlor, Nursery, Portico, Yard or Lawn. They can be most conveniently attached to ceilings of Porches, but with the addition of one post, about four or five inches square, can be placed beside a house or alongside a tree, but in a clear space require a frame like cut, which is furnished only when ordered, at an additional cost.

The usual length of Swings will be 12 feet, unless ordered otherwise. Give the exact height between floor and ceiling — will furnish one to fit.

Weight, 60 pounds each; price, - - - each, \$12 00

# BLACKSMITHS' GOODS.

## LONG ARM AXLES.



$\frac{7}{8}$ and 1 inch,	- - - - -	per pound, 8 cents.
$1\frac{1}{8}$ and over,	- - - - -	" 7 "
Best Charcoal Iron, advance	- - - - -	" 2 "

The arms of all our axles are square. If wanted chamfered or tapered, so specify in your order.

## WEIGHT OF LONG ARM AXLES, PER SET.

1 inch,	- - -	about 44 pounds.	$1\frac{3}{4}$ inch,	- - -	about 146 pounds.
$1\frac{1}{8}$ "	- - -	" 55 "	2 "	- - -	" 200 "
$1\frac{1}{4}$ "	- - -	" 66 "	$2\frac{1}{4}$ "	- - -	" 250 "
$1\frac{3}{8}$ "	- - -	" 83 "	$2\frac{1}{2}$ "	- - -	" 300 "
$1\frac{1}{2}$ "	- - -	" 100 "	$2\frac{3}{4}$ "	- - -	" 384 "
$1\frac{5}{8}$ "	- - -	" 116 "	3 "	- - -	" 493 "

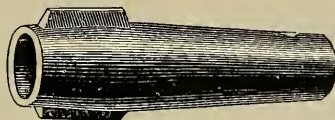
The following sizes we have in stock or can furnish on short notice :

$\frac{7}{8}$ by 6 inches.	$1\frac{5}{8}$ by $8\frac{1}{2}$ *, 9*, and $9\frac{1}{2}$ inch.
1 by 6 and $6\frac{1}{2}$ * inch.	2 by 9*, $9\frac{1}{2}$ *, 10*, $10\frac{1}{2}$ *, 11*, $11\frac{1}{2}$ and 12 inch.
$1\frac{1}{8}$ by 6, $6\frac{1}{2}$ * and 7 inch.	$2\frac{1}{4}$ by 10, $10\frac{1}{2}$ *, 11*, 12* and 13 inch.
$1\frac{1}{4}$ by 6, $6\frac{1}{2}$ *, 7 and $7\frac{1}{2}$ inch.	$2\frac{1}{2}$ by $11\frac{1}{2}$ *, 12* and 13* inch.
$1\frac{3}{8}$ by 6, $6\frac{1}{2}$ *, 7*, $7\frac{1}{2}$ *, 8 and $8\frac{1}{2}$ inch.	$2\frac{3}{4}$ by $11\frac{1}{2}$ *, 12, 13 and 14 inch.
$1\frac{1}{2}$ by $6\frac{1}{2}$ *, 7, $7\frac{1}{2}$ *, 8*, $8\frac{1}{2}$ and 9 inch.	3 by 13*, and 14 inch.
$1\frac{3}{4}$ by 8, $8\frac{1}{2}$ *, 9, $9\frac{1}{2}$ *, 10*, $10\frac{1}{2}$ *, 11*, $11\frac{1}{2}$ and 12 inch.	$3\frac{1}{2}$ by 14, and 15 inch.

Those marked with a \* are reamed or chilled, as ordered. Axles with chilled boxes we sell at the same price as reamed, though for wear they are vastly more valuable. In this city they are used almost exclusively by the omnibus and transportation companies — outwearing soft boxes and pulling much lighter.

# PIPE BOXES.

Of all the sizes of Axles on preceding page.



$1\frac{1}{2}$ inch and under,	- - - - -	per pound, 8 cents.
Over $1\frac{1}{2}$ inch,	- - - - -	" 7 "

**CHILLED PIPE BOXES same price as REAMED.**

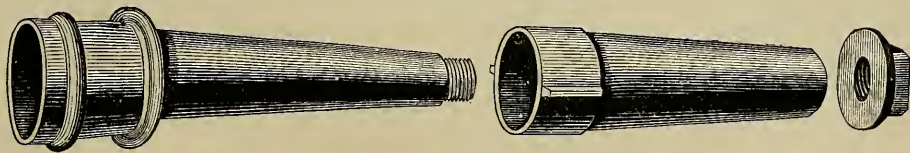
Our Pipe Boxes taper from butt to point, as follows:

$\frac{7}{8}$ , 1, $1\frac{1}{8}$ , $1\frac{1}{4}$ , $1\frac{3}{8}$ , $1\frac{1}{2}$ , $1\frac{5}{8}$ inch, one-eighth of an inch.	$2\frac{1}{2}$ inch, five-eighths of an inch.
$1\frac{3}{4}$ , 2 inch, one-quarter of an inch.	$2\frac{3}{4}$ inch, one-half of an inch.
$2\frac{1}{4}$ inch, one-half of an inch.	3 inch, three-quarters of an inch.

It is very inconvenient and expensive for us to make sizes different from above, as it usually involves the making of a new pattern, core box and reamer. When insisted on we do it, charging the additional cost, usually about five dollars.

Where odd lengths are wanted, causing extra time and loss in cutting, they will be charged extra price.

## PATENT WAGON THIMBLE SKEINS.

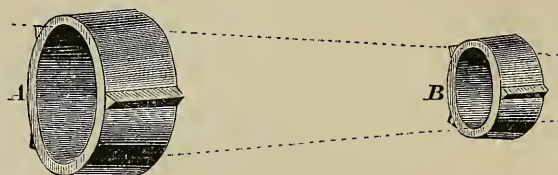


$2\frac{1}{4}$ by 7 inches,	- -	per set, \$3 75	$3\frac{1}{4}$ by 10 inches,	- -	per set, \$7 50
$2\frac{3}{8}$ by 7 "	- "	4 25	$3\frac{1}{2}$ by 10 "	- "	8 00
$2\frac{1}{2}$ by $7\frac{1}{2}$ "	- "	4 50	$3\frac{1}{2}$ by 11 "	- "	8 00
$2\frac{1}{2}$ by 8 "	- "	4 60	$3\frac{1}{2}$ by 12 "	- "	8 05
$2\frac{3}{4}$ by 8 "	- "	4 90	$3\frac{3}{4}$ by 11 "	- "	8 25
$2\frac{3}{4}$ by $8\frac{1}{2}$ "	- "	4 90	$3\frac{3}{4}$ by 12 "	- "	8 60
3 by 9 "	- "	6 00	4 by 12 "	- "	9 75
$3\frac{1}{4}$ by 9 "	- "	6 90	$4\frac{1}{2}$ by 13 "	- "	12 56

We cast both Skein and Nut complete with thread, thereby being enabled to use a more suitable quality of iron than when the thread must be cut. The objection to that method has usually been that the nuts do not fit. We make ours very tight — running them on at first by machinery, and we guarantee a better fit than is usually found on skeins with cut threads.



## WAGON BOXES.



Per pound, - - - - - 5 cents.

If not otherwise ordered, we tie the following sizes together:

3 inch butt, with  $1\frac{1}{2}$  inch points.

3 $\frac{1}{4}$	"	"	"	1 $\frac{3}{4}$	"	"
3 $\frac{1}{2}$	"	"	"	1 $\frac{3}{4}$	"	"
3 $\frac{3}{4}$	"	"	"	2	"	"
4	"	"	"	2 $\frac{1}{4}$	"	"

4 $\frac{1}{4}$  inch butt, with  $2\frac{1}{4}$  inch points.

4 $\frac{1}{2}$	"	"	"	2 $\frac{1}{2}$	"	"
4 $\frac{3}{4}$	"	"	"	2 $\frac{3}{4}$	"	"
5	"	"	"	3	"	"
5 $\frac{1}{4}$	"	"	"	3 $\frac{1}{4}$	"	"

## BLACKSMITHS' MANDRELS.

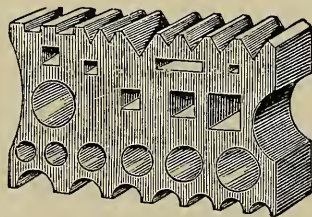


No. 1, 1 inch diameter at top,  $9\frac{1}{2}$  at base, - - weight about 128 pounds.

"	2, 3	"	"	"	"	12	"	"	"	216	"
"	3, 10	"	"	"	"	17 $\frac{1}{2}$	"	"	(flanged)	"	500

Price, per pound, - - - - - 6 cents.

## BLACKSMITHS' SWAGE BLOCKS.



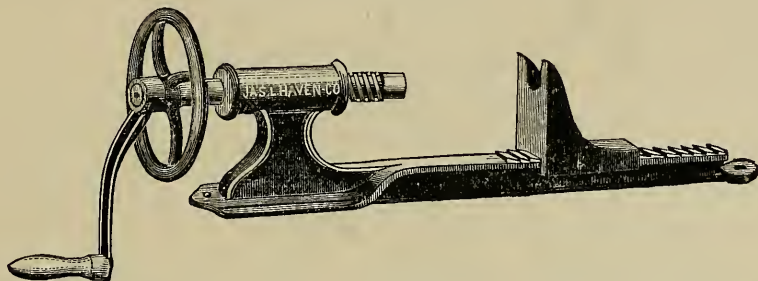
No. 1, oblong pattern, (like cut) - - - - - each, \$7 00

" 2, square " - - - - - " 5 00

" 3, " " - - - - - " 9 50

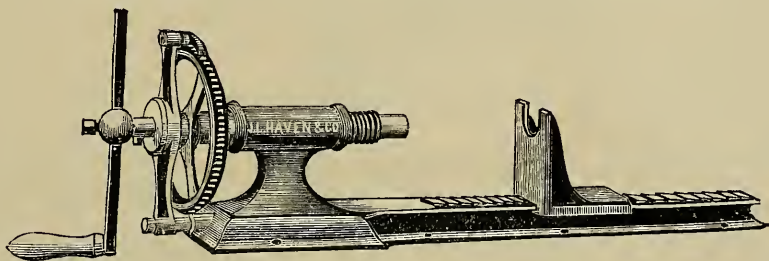
## HAVEN'S PATENT BLACKSMITHS' TIRE DRILLS.

Improved in Quality and Reduced in Price.



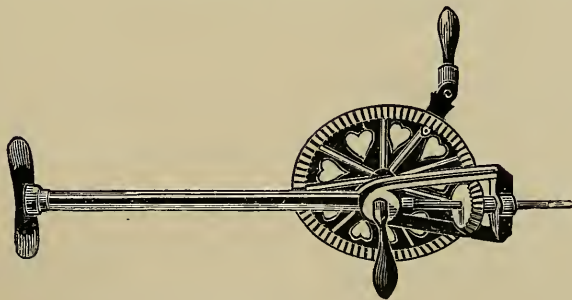
New pattern, patented; weight, 33 pounds, - - - - each, \$4 50

## PATENT SELF-FEEDING TIRE DRILL.



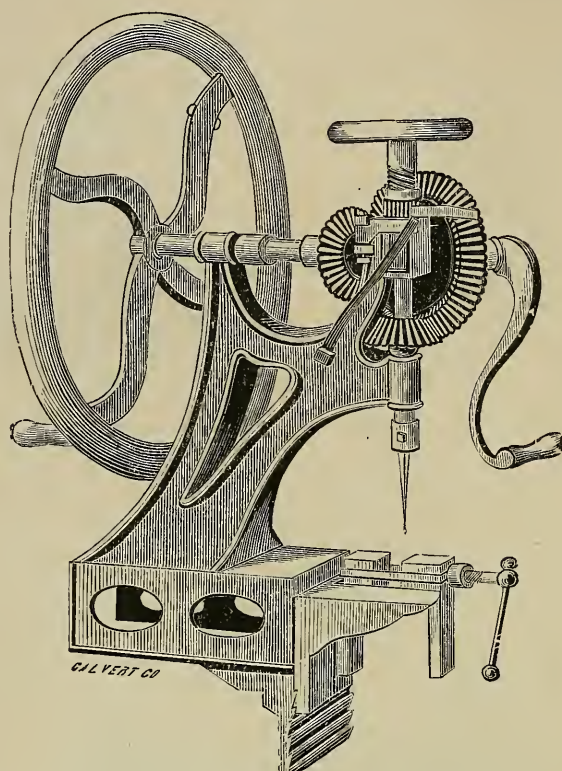
Weight, 45 pounds; price, - - - - - each, \$6 00

## BREAST DRILLS.



Per dozen, - - - - - \$24 00  
 " " with three drills to each, - - - - - 27 00

COE'S PATENT  
UPRIGHT DRILL PRESS



AND

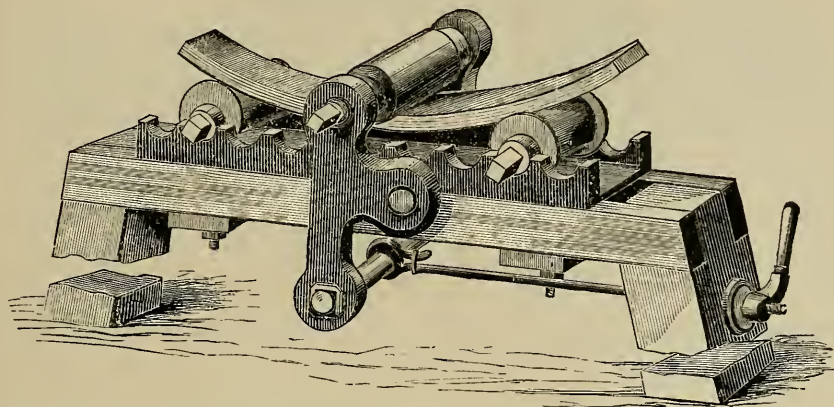
SCREW CUTTING MACHINE.

These Machines are indispensable to blacksmiths, carriage, wagon and plow manufacturers, after any establishment purchases one, and finds the many conveniences to which it can be put.

- |   |         |
|---|---------|
| No. 0 — Is without Vise Attachment, and suitable for ordinary blacksmith work. Weight, 100 pounds. Price, - - - - -   | \$28 00 |
| No. 1 — Suitable for carriage, wagon and ordinary blacksmith work, and for drilling holes up to one inch. We do not recommend No. 1 for cutting screws. Weight, 130 pounds. Price, with Vise Attachment, - - - - -            | 40 00   |
| No. 2 — With Vise Attachment, is suitable for all kinds of light and heavy work; cutting bolts and nuts up to $\frac{3}{4}$ of an inch. This size is most generally used by plow makers. Weight, 200 pounds. Price, - - - - - | 50 00   |
| Extra for each pair Taps and Dies, - - - - -  | 4 50    |
| Extra for Chuck to hold Dies, - - - - -   | 3 00    |

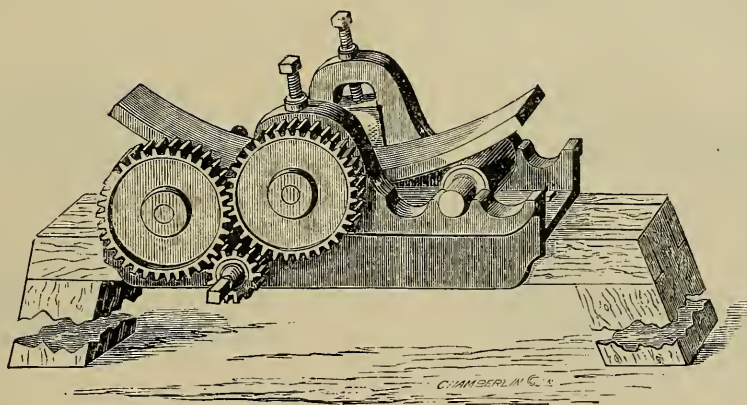
The crank on the drive-wheel is used for all light work, and the one on the balance-wheel for heavy work and screw-cutting. The machine, by its peculiar adaptation to both heavy and light work, combines both speed and power; at the same time it is perfectly simple, strong and not liable to get out of order. If desired the No. 2 machine can be run by power, by putting a pulley on the shaft near the balance-wheel. This is one of the greatest labor-saving machines for blacksmiths in use. No smith can afford to be without one. They are gotten up in first-class style.

## TIRE BENDERS.



No. 1, old style, (new pattern,) solid back; weight, 80 pounds, - each, \$7 50

We show the wood-work, rod, nut, &c., for illustration merely; we do not furnish them at the price named.



No. 2, weight, 150 pounds, - - - - - each, \$15 00

Made very heavy and strong (the main roller wrought iron), geared four to one, so that one man can turn it for all ordinary Tires, and two can easily bend iron 1 by 5 inches for dray or other small wheels.

Wood-work shown for illustration only; not furnished at the price named.

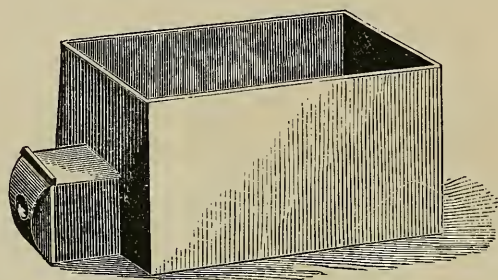
## PRICE LIST OF PATENT TWIST DRILL BITS,

Made expressly for Coe's Drill Press.

1-8	3-16	1-4	5-16	3-8	7-16	1-2	9-16	5-8	11-16	3-4	13-16	7-8	1 inch
\$0 90	1 05	1 05	1 10	1 10	1 15	1 25	1 35	1 50	1 65	1 90	2 10	2 35	3 00



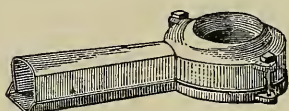
## WATER TWEER IRONS.



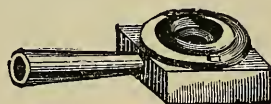
Size, 9 by 17 by 12 inches; weight, 100 pounds, - each, \$7 00

This is a very desirable pattern, as there are no pipes to get out of order, and freezing does not injure them. They have been in use for years without renewal.

## DUCK NEST TWEER IRONS.



No. 1, 17 lbs. each, per doz., - \$13 00



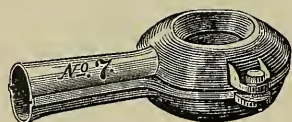
No. 2, 23 lbs. each, per doz., - \$16 00



No. 5, 12 lbs. each, per doz., - \$10 50



No. 6, 15 lbs. each, per doz., - \$13 00



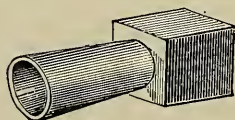
No. 7, 17 lbs. each, per doz., - \$13 50



No. 8, 21 lbs. each, per doz., - \$18 00

Nos. 7 and 8 are double faced; when one side is burnt out, by turning over a new face is presented to the fire.

## NEGRO HEAD.

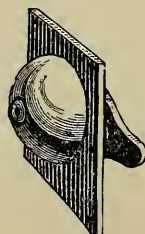


No. 1, 13 pounds, - per doz., \$10 00

" 2, 21 " - - " 15 00

" 3, 41 " - - " 27 00

## BULL'S EYE.



Each, \$5 00

## CARRIAGE BOLTS.



Made from Charcoal Iron, with Forged Nuts and Turned Heads.

## STANDARD PRICE LIST.

LIST PRICE PER HUNDRED.

Length.	1-4 inch.	5-16 inch.	3-8 inch.	7-16 inch.	1-2 inch.	5-8 inch.
1 $\frac{1}{4}$ inch,	\$2 40	\$2 70	- -	- -	- -	- -
1 $\frac{1}{2}$ "	2 40	2 70	\$3 70	- -	- -	- -
1 $\frac{3}{4}$ "	2 45	2 80	3 70	- -	- -	- -
2 "	2 50	2 90	3 70	\$5 40	\$7 20	- -
2 $\frac{1}{4}$ "	2 55	3 00	3 82	5 70	7 60	- -
2 $\frac{1}{2}$ "	2 60	3 10	3 95	5 70	7 60	- -
2 $\frac{3}{4}$ "	2 65	3 20	4 20	6 00	8 00	- -
3 "	2 70	3 30	4 20	6 00	8 00	\$13 00
3 $\frac{1}{4}$ "	2 75	3 50	4 45	6 30	8 40	13 75
3 $\frac{1}{2}$ "	2 80	3 50	4 45	6 30	8 40	13 75
3 $\frac{3}{4}$ "	2 85	3 70	4 70	6 60	8 80	14 50
4 "	2 90	3 70	4 70	6 60	8 80	14 50
4 $\frac{1}{2}$ "	3 00	3 90	4 95	6 90	9 20	15 25
5 "	3 10	4 10	5 20	7 20	9 60	16 00
5 $\frac{1}{2}$ "	3 20	4 30	5 45	7 50	10 00	16 75
6 "	3 30	4 50	5 70	7 80	10 40	17 50
6 $\frac{1}{2}$ "	3 40	4 70	5 95	8 10	10 80	18 25
7 "	3 50	4 90	6 20	8 40	11 20	19 00
7 $\frac{1}{2}$ "	- -	5 10	6 45	8 70	11 60	19 75
8 "	- -	5 30	6 70	9 00	12 00	20 50
8 $\frac{1}{2}$ "	- -	- -	6 95	9 30	12 40	21 25
9 "	- -	- -	7 20	9 60	12 80	22 00
9 $\frac{1}{2}$ "	- -	- -	- -	9 90	13 20	22 75
10 "	- -	- -	- -	10 20	13 60	23 50
11 "	- -	- -	- -	- -	14 40	25 00
12 "	- -	- -	- -	- -	15 20	26 50

USUAL QUALITY, - - - - -

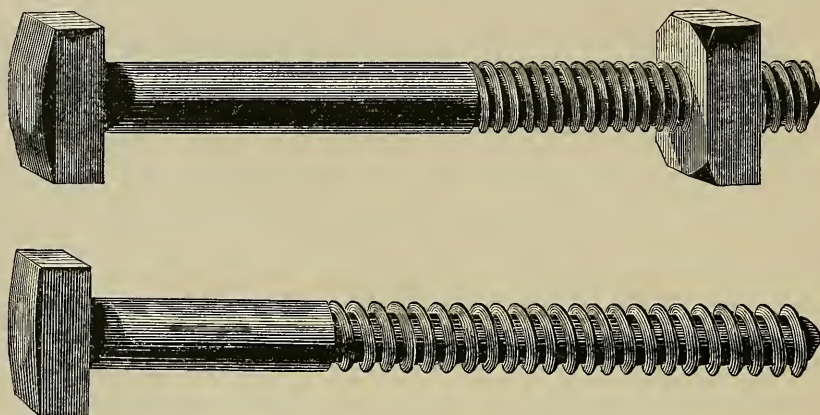
RUSSELL, BURDSALL & WARD'S, - - -

per cent. discount.

" " "

## SQUARE HEAD

## MACHINE BOLTS AND WOOD SCREWS.



## LIST PRICE PER HUNDRED.

Length.	1-4 inch.	5-16 inch.	3-8 inch.	7-16 inch.	1-2 inch.	5-8 inch.	3-4 inch.
1½ inch,	\$4 35	\$4 50	\$4 87	\$5 50	\$6 60	\$9 75	\$15 40
1¾ " "	4 42	4 57	4 95	5 60	6 70	9 90	15 40
2 " "	4 50	4 65	5 02	5 70	6 75	10 05	15 60
2¼ " "	4 57	4 72	5 10	5 80	6 85	10 20	15 75
2½ " "	4 65	4 80	5 17	5 90	6 90	10 35	15 90
2¾ " "	4 72	4 87	5 25	6 00	7 00	10 50	16 05
3 " "	4 80	4 95	5 32	6 10	7 05	10 65	16 20
3½ " "	4 95	5 10	5 47	6 30	7 20	11 00	16 70
4 " "	5 10	5 25	5 62	6 60	7 35	11 50	17 20
4½ " "	5 22	5 37	5 74	6 90	7 60	12 25	17 90
5 " "	5 34	5 49	5 86	7 20	7 90	13 00	18 60
5½ " "	5 46	5 61	5 98	7 50	8 20	13 75	19 60
6 " "	5 58	5 73	6 10	7 80	8 55	14 50	20 60
6½ " "	5 70	5 85	6 22	8 10	8 90	15 25	21 60
7 " "	5 82	5 97	6 34	8 40	9 30	16 00	22 60
7½ " "	5 94	6 09	6 46	8 70	9 65	16 75	23 60
8 " "	6 06	6 21	6 58	9 00	10 25	17 50	24 60

Discount

per cent.

## PRICE FOR BOLTS OVER EIGHT INCHES LONG.

Diameter.	Length.	Price per lb.	Diameter.	Length.	Price per lb.
$\frac{1}{2}$ and 9-16 in.	$8\frac{1}{4}$ to 24 in.	13 cents.	$\frac{7}{8}$ , 1 and $1\frac{1}{8}$ in.	$7\frac{1}{4}$ to 24 in.	12 cents.
$\frac{5}{8}$ "	$8\frac{1}{4}$ " 24 "	12 $\frac{1}{2}$ "	$\frac{7}{8}$ , 1 and $1\frac{1}{8}$ "	$24\frac{1}{4}$ " 48 "	11 "
$\frac{5}{8}$ "	$24\frac{1}{4}$ " 48 "	11 $\frac{1}{2}$ "	$1\frac{1}{4}$ , $1\frac{3}{8}$ & $1\frac{1}{2}$ "	4 " 7 "	13 "
$\frac{3}{4}$ "	$8\frac{1}{4}$ " 24 "	11 $\frac{1}{2}$ "	$1\frac{1}{4}$ , $1\frac{3}{8}$ & $1\frac{1}{2}$ "	$7\frac{1}{4}$ " 24 "	12 "
$\frac{3}{4}$ "	$24\frac{1}{4}$ " 48 "	11 "	$1\frac{1}{4}$ , $1\frac{3}{8}$ & $1\frac{1}{2}$ "	$24\frac{1}{4}$ " 48 "	11 "
$\frac{7}{8}$ , 1 and $1\frac{1}{8}$ "	3 " 7 "	13 "			

Discount per pound.

## TIRE BOLTS.



Made from Charcoal Iron, with Forged Nuts.

LIST PRICE PER HUNDRED.

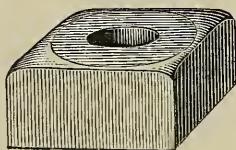
Length.	1-8 inch.	3-16 inch.	1-4 inch.	5-16 inch.	3-8 inch.	7-16 inch.	1-2 inch.
$1\frac{1}{4}$ inch,	\$1 40	\$1 40	\$1 40	\$2 50	\$3 20	- -	- -
$1\frac{1}{2}$ "	1 40	1 40	1 40	2 50	3 20	- -	- -
$1\frac{3}{4}$ "	1 45	1 45	1 45	2 50	3 20	- -	- -
2 "	1 50	1 50	1 50	2 50	3 20	- -	- -
$2\frac{1}{4}$ "	1 55	1 55	1 55	2 58	3 30	- -	- -
$2\frac{1}{2}$ "	1 60	1 60	1 60	2 65	3 40	- -	- -
$2\frac{3}{4}$ "	1 65	1 65	1 65	2 73	3 50	- -	- -
3 "	1 70	1 70	1 70	2 80	3 60	\$5 30	\$6 60
$3\frac{1}{4}$ "	1 75	1 75	1 75	2 88	3 70	5 45	6 80
$3\frac{1}{2}$ "	1 80	1 80	1 80	2 95	3 80	5 65	6 98
$3\frac{3}{4}$ "	1 90	1 90	1 90	3 03	4 00	5 83	7 17
4 "	1 90	1 90	1 90	3 03	4 00	6 00	7 40
$4\frac{1}{4}$ "	- -	- -	- -	3 18	4 20	6 20	7 45
$4\frac{1}{2}$ "	- -	- -	- -	3 18	4 20	6 35	7 75
$4\frac{3}{4}$ "	- -	- -	- -	3 33	4 40	6 55	7 93
5 "	- -	- -	- -	3 33	4 40	6 73	8 12
$5\frac{1}{4}$ "	- -	- -	- -	- -	- -	6 91	8 31
$5\frac{1}{2}$ "	- -	- -	- -	- -	- -	6 95	8 50

USUAL QUALITY, - - - - - per cent. discount.  
 RUSSELL, BURDSALL & WARD'S, - - - - - " " "



# PATENT HOT-PRESSED NUTS.

## SQUARE.

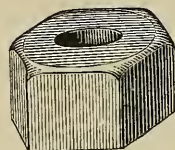


In 200 Pound Kegs.

Square.	Thick.	Hole.	Bolt.	Price
7-16	3-16	5-32	3-16	35
1-2	3-16	5-32	3-16	35
1-2	1-4	7-32	1-4	23
5-8	5-16	9-32	5-16	20
3-4	3-8	11-32	3-8	15
7-8	7-16	13-32	7-16	14
7-8	1-2	7-16	1-2	14
1	1-2	7-16	1-2	12
1 1-8	1-2	1-2	9-16	12
1 1-8	5-8	9-16	5-8	12
1 1-4	5-8	9-16	5-8	11½
1 3-8	3-4	11-16	3-4	11½
1 1-2	3-4	11-16	3-4	11½
1 5-8	7-8	13-16	7-8	11
1 3-4	7-8	13-16	7-8	11
1 3-4	1	29-32	1	11
2	1	29-32	1	11
2	1 1-8	1	1 1-8	12
2 1-4	1 1-8	1	1 1-8	12
2 1-4	1 1-8	1 1-8	1 1-4	12
2 1-2	1 1-4	1 1-8	1 1-4	12
2 3-4	1 3-8	1 1-4	1 3-8	12½
3	1 1-2	1 3-8	1 1-2	12½
3 1-4	1 5-8	1 7-16	1 5-8	14
3 1-2	1 3-4	1 9-16	1 3-4	14
3 3-4	1 7-8	1 11-16	1 7-8	14
4	2	1 13-16	2	14

Less cents per pound.

## HEXAGON.



In 200 Pound Kegs.

Square.	Thick.	Hole.	Bolt.	Price
3-4	3-8	11-32	3-8	21
7-8	1-2	7-16	1-2	20
1	1-2	7-16	1-2	18
1 1-8	5-8	9-16	5-8	18
1 1-4	3-4	9-16	5-8	16½
1 3-8	3-4	11-16	3-4	16½
1 3-8	7-8	11-16	3-4	16½
1 1-2	1	13-16	7-8	16
1 5-8	1	13-16	7-8	16
1 3-4	1	29-32	1	16
1 3-4	1 1-8	29-32	1	16
2	1 1-4	1	1 1-8	17
2 1-4	1 3-8	1 1-8	1 1-4	17
2 1-2	1 1-2	1 1-4	1 3-8	17
2 3-4	1 5-8	1 3-8	1 1-2	17½
3	1 3-4	1 7-16	1 5-8	17½
3 1-4	1 7-8	1 9-16	1 3-4	19
3 1-2	2	1 11-16	1 7-8	19
3 1-2	2	1 13-16	2	19

Less cents per pound.

## APPROXIMATE CONTENTS OF 200 POUND KEGS.

Size of Bolt,	½	¾	¾	¾	1	1½	1¼	1½ in.
Square Nuts,	2120	1100	700	420	280	180	140	80
Hexagon Nuts,	2500	1260	800	480	330	210	160	90

## WROUGHT WASHERS.



In 150 Pound Kegs.

Diameter.	Hole.	Bolt.	Price per lb.
3-4	5-16	1-4	24 cents
7-8	3-8	5-16	22 "
I	7-16	3-8	18 "
I 1-8	I-2	7-16	} 15 "
I 1-4	9-16	I-2	
I 1-2	5-8	9-16	} 14 "
I 1-2	11-16	5-8	
I 3-4	13-16	3-4	} 13 "
2	I	7-8	
2 1-4	I 1-8	I	} 13 "
2 1-2	I 1-4	I 1-8	
2 3-4	I 3-8	I 1-4	} 13 "
3	I 1-2	I 3-8	

*Less cents per pound.*WROUGHT  
WAGON BOW STAPLES.

Put up in 1-2 gross boxes.



1½, 1¾, 2, 2¼, 2½ inches, per gross, \$2 50

WROUGHT  
FELLOE CLIPS.

⅞, 1, 1⅛, 1¼, 1⅝, 1½, 1⅝, 1¾.

Price in bulk by the keg, - 14½ cents  
 " " 10 pound boxes, - 15 "

WAGON SKEIN BOLTS—  
COACH SCREWS.

¾	inch, per pound, -	-	10 cents
⅝	" " -	-	10 "
9-16	" " -	-	11 "
½	" " -	-	12 "
7-16	" " -	-	16 "
⅜	" " -	-	19 "

## WAGON RIVETS.

Large Flat Heads.



¼ inch diameter.

*per lb.*

1½, 1¾, 2, 2¼, 2½, 3, 3½ inches, 14 cents

## WAGON NAILS.

Oval or Countersunk Heads.



¼ inch diameter.

Put up in 5 lb. boxes.

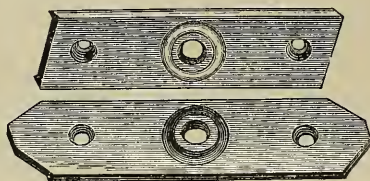
2, 2½, 3, 3½, 4 inches, per lb., 20 cents

## CAST WASHERS.



To order, at from 3 to 5 cts. per lb. net.

## WROUGHT BOLSTER PLATES.



Rolled by a patented process, with raised and indented circles and ribbed edges, as shown, combining all the advantages of both cast and wrought, and at the same time cheaper than cast iron.

Number.	Length.	Width.	King Bolt.	Price.		
0	11 inch,	2 $\frac{3}{4}$ inch,	$\frac{7}{8}$ inch,	-	-	48 cents per pair.
1	12 "	3 "	1 "	-	-	50 " "
2	12 "	3 $\frac{1}{4}$ "	1 $\frac{1}{8}$ "	-	-	53 " "
3	13 "	3 $\frac{1}{2}$ "	1 $\frac{1}{8}$ "	-	-	55 " "

## WAGON BOX STRAP BOLTS.



10 inches long by 7-16 at screw end, per set of 8 Bolts,										-	-	-	40 cents	
12	"	"	"	$\frac{1}{2}$	"	"	"	"	8	"	-	-	55	"
14	"	"	"	$\frac{5}{8}$	"	"	"	"	8	"	-	-	80	"
16	"	"	"	$\frac{3}{4}$	"	"	"	"	8	"	-	-	90	"

## BLACKSMITHS' TONGS.



Length,	18	20	22	24	26	28	30 inches
Per pair,	55	65	70	75	80	85	110 cents

## COLD CHISELS.



Cast steel, assorted, - - - - - per pound, 40 cents

# MALLEABLE CASTINGS.

We have added materially to our assortment of Malleable Castings, and have given, as far as possible, descriptions which will enable our customers to order understandingly. The weight is given for 100 pieces or pairs, as being the most convenient in most cases.

To find the weight of any number of pieces, multiply by it, divide by 100, or point off two places for decimals:

$$1 \text{ dozen } 489 = 7\frac{1}{2} \times 12 = .90 \text{ lbs.}$$

$$1 \text{ dozen } 504 = 16 \times 12 = 1.92 \text{ lbs.}$$

We wire in bunches of one dozen, as most buyers prefer that number tied together.

## AXLE YOKES, or CLIP TIES.



Plain, Flat.



Sunk Face.



Hollow, Circular Face.



With Safety Loop.

No. 489, plain, flat, for 1 inch axle,	-	-	-	-	7 $\frac{1}{2}$ pounds per 100
" 490, " " " 1 $\frac{1}{8}$ " " " " " "	-	-	-	-	11 $\frac{1}{2}$ " " "
" 491, " " " 1 $\frac{1}{4}$ " " " " " "	-	-	-	-	12 $\frac{1}{2}$ " " "
" 492, " " " 1 $\frac{3}{8}$ " " " " " "	-	-	-	-	13 $\frac{1}{2}$ " " "
" 493, " " " 1 $\frac{1}{2}$ " " " " " "	-	-	-	-	14 $\frac{1}{2}$ " " "
" 494, sunk face, light pattern, for $\frac{7}{8}$ inch axle,	-	-	-	-	7 " " "
" 495, " " " " " " 1 " " " " "	-	-	-	-	8 " " "
" 496, " " " " " " 1 $\frac{1}{8}$ " " " " "	-	-	-	-	9 " " "
" 497, " " " " " " 1 $\frac{1}{4}$ " " " " "	-	-	-	-	10 " " "
" 498, " " " " " " 1 $\frac{3}{8}$ " " " " "	-	-	-	-	13 " " "
" 499, " " " " " " 1 $\frac{1}{2}$ " " " " "	-	-	-	-	15 " " "
" 476, " " heavy " " " 1 $\frac{1}{8}$ " " " " "	-	-	-	-	18 $\frac{1}{2}$ " " "
" 477, " " " " " " 1 $\frac{1}{4}$ " " " " "	-	-	-	-	19 " " "
" 478, " " " " " " 1 $\frac{3}{8}$ " " " " "	-	-	-	-	21 " " "
" 500, hollow, circular face, for 1 inch axle,	-	-	-	-	9 $\frac{1}{2}$ " " "
" 501, " " " " " 1 $\frac{1}{8}$ " " " " "	-	-	-	-	12 " " "
" 502, " " " " " 1 $\frac{1}{4}$ " " " " "	-	-	-	-	13 " " "
" 503, with safety loop, for $\frac{7}{8}$ inch axle, $\frac{7}{8}$ inch loop,	-	-	-	-	15 " " "
" 504, " " " " " 1 " " " $\frac{7}{8}$ " " "	-	-	-	-	16 " " "



## SPRING CLIP HOLDERS.



No. 145,	for	$1\frac{1}{2}$ inch	springs,	3	inch	between	grooves,	-	21	pounds	per	100
" 146,	"	$1\frac{1}{2}$ "	"	$3\frac{1}{2}$ "	"	"	"	-	22	"	"	"
" 147,	"	$1\frac{3}{8}$ "	"	3 "	"	"	"	-	19	"	"	"
" 148,	"	$1\frac{3}{8}$ "	"	$3\frac{1}{2}$ "	"	"	"	-	22	"	"	"
" 149,	"	$1\frac{1}{4}$ "	"	3 "	"	"	"	-	22	"	"	"
" 150,	"	$1\frac{1}{4}$ "	"	$3\frac{1}{2}$ "	"	"	"	-	22	"	"	"

## KING BOLT PLATES.



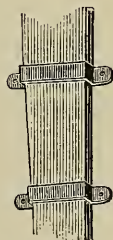
No. 505,	$8\frac{1}{2}$ inches	long,	for	$\frac{5}{8}$ inch	bolts,	-	-	-	-	36	pounds	per	100
" 512,	7	"	"	$\frac{1}{2}$ "	"	-	-	-	-	27	"	"	"
" 513,	7	"	"	$\frac{1}{2}$ "	"	-	-	-	-	28	"	"	"
" 514,	7	"	"	$\frac{3}{8}$ "	"	-	-	-	-	21	"	"	"

## WAGON BOW IRONS.

In Pairs, for Tapering Ends.



No. 508



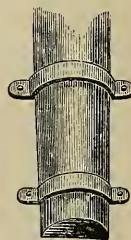
No. 509



No. 509½



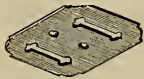
No. 511



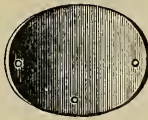
No. 510

No. 508,	top	one,	$1\frac{3}{8}$ by	$\frac{3}{4}$ inch;	weight,	-	-	-	33	pound	per	100	pairs
" 509,	"	"	$1\frac{7}{8}$ by	$\frac{3}{8}$ "	"	-	-	-	16	"	"	"	"
" 509½,	"	"	$1\frac{5}{8}$ by	$\frac{5}{8}$ "	"	-	-	-	20	"	"	"	"
" 511,	"	"	$1\frac{1}{8}$ by	$1\frac{1}{8}$ "	"	-	-	-	20	"	"	"	"
" 510,	"	"	$1\frac{1}{2}$ in.,	half	round;	"	-	-	-	$17\frac{1}{2}$	"	"	"

## STEP PLATES.



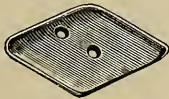
No. 479



No. 480



Nos. 486 487 488



No. 518



Nos. 519 520 521



No. 590

No. 479, $4\frac{1}{2}$ by $5\frac{3}{4}$ inches; weight,	-	-	-	-	-	83 pounds per 100
" 480, $3\frac{1}{2}$ by $4\frac{1}{2}$ " oval,	-	-	-	-	-	27 " " "
" 486, $3\frac{1}{4}$ by $3\frac{3}{4}$ " "	-	-	-	-	-	28 " " "
" 487, $3\frac{1}{2}$ by $4\frac{1}{4}$ " "	-	-	-	-	-	42 " " "
" 488, 4 by $5\frac{1}{4}$ " "	-	-	-	-	-	54 " " "
" 518, $3\frac{1}{2}$ by $4\frac{3}{8}$ " "	-	-	-	-	-	$62\frac{1}{2}$ " " "
" 519, $3\frac{1}{2}$ inches diameter,	-	-	-	-	-	38 " " "
" 520, $3\frac{3}{4}$ " " "	-	-	-	-	-	40 " " "
" 521, $4\frac{1}{4}$ " " "	-	-	-	-	-	64 " " "
" 590, Body Steps, in pairs, 4 by 7 inches, -	-	-	-	-	-	200 pounds per 100 pairs

## CORNER IRONS.



Nos. 522 523



Nos. 524 525



No. 526

No. 522, $2\frac{1}{4}$ inches long, $\frac{1}{2}$ inch wide, -	-	-	-	-	$7\frac{1}{2}$ pounds per 100
" 523, $2\frac{1}{2}$ " " 9-16 " " "	-	-	-	-	$10\frac{1}{2}$ " " "
" 524, $2\frac{1}{4}$ " " $\frac{5}{8}$ " " "	-	-	-	-	$12\frac{1}{2}$ " " "
" 525, $2\frac{1}{2}$ " " $\frac{5}{8}$ " " "	-	-	-	-	14 " " "
" 526, $2\frac{3}{4}$ " " $\frac{1}{2}$ " " beveled,	-	-	-	-	10 " " "

## COLLARS.



No. 530,	$\frac{3}{4}$ inch high,	7-16 inch hole,	-	-	-	-	-	10 pounds per 100
" 531,	$\frac{7}{8}$ "	" " " "	-	-	-	-	-	11 " " "
" 532,	1 "	" " " "	-	-	-	-	-	12 " " "
" 533,	$1\frac{1}{8}$ "	" " " "	-	-	-	-	-	$14\frac{1}{4}$ " " "
" 534,	$1\frac{1}{4}$ "	" " " "	-	-	-	-	-	20 " " "

## ROUND FERRULES.



These sizes are the inside diameter at the largest end, the small end being about one-eighth of an inch less.

No. 540,	$\frac{1}{2}$ in. diam.,	9-16 in. long,	-	-	-	-	-	$2\frac{1}{2}$ pounds per 100
" 541,	$\frac{5}{8}$ " "	$\frac{5}{8}$ " "	-	-	-	-	-	$3\frac{1}{2}$ " " "
" 542,	$\frac{3}{4}$ " "	$\frac{3}{4}$ " "	-	-	-	-	-	$4\frac{1}{2}$ " " "
" 543,	$\frac{7}{8}$ " "	$\frac{3}{4}$ " "	-	-	-	-	-	$6\frac{1}{4}$ " " "
" 544,	1 " "	$\frac{7}{8}$ " "	-	-	-	-	-	8 " " "
" 545,	$1\frac{1}{8}$ " "	$\frac{7}{8}$ " "	-	-	-	-	-	$9\frac{1}{2}$ " " "
" 546,	$1\frac{1}{4}$ " "	1 " "	-	-	-	-	-	11 " " "
" 547,	$1\frac{3}{8}$ " "	$1\frac{1}{8}$ " "	-	-	-	-	-	$13\frac{1}{2}$ " " "
" 548,	$1\frac{1}{2}$ " "	$1\frac{1}{8}$ " "	-	-	-	-	-	$14\frac{3}{4}$ " " "
" 549,	$1\frac{3}{4}$ " "	$1\frac{1}{4}$ " "	-	-	-	-	-	$22\frac{1}{2}$ " " "
" 461,	$\frac{3}{4}$ " "	$\frac{7}{8}$ " "	tapered for whiffle trees,					$6\frac{1}{2}$ " " "
" 462,	$\frac{7}{8}$ " "	$\frac{7}{8}$ " "	" " "					7 " " "
" 463,	1 " "	1 " "	" " "					$7\frac{3}{4}$ " " "
" 463 $\frac{1}{2}$ ,	$1\frac{1}{8}$ " "	$1\frac{1}{8}$ " "	" " "					$9\frac{3}{4}$ " " "

## CLOSED END FERRULES.



No. 555,	$\frac{3}{4}$ inch diameter,	1 inch long,	for whiffle trees,	-	$7\frac{3}{4}$ pounds per 100
" 556,	$\frac{7}{8}$ " "	1 " "	" " "	-	9 " " "
" 557,	1 " "	$1\frac{1}{8}$ " "	" " "	-	$10\frac{1}{2}$ " " "
" 558,	$1\frac{1}{8}$ " "	$1\frac{1}{8}$ " "	" " "	-	11 " " "
" 559,	$1\frac{1}{4}$ " "	$1\frac{1}{8}$ " "	" " "	-	$17\frac{1}{2}$ " " "

## LOOP HOLDERS.



No. 564,	for	$\frac{3}{4}$	inch straps,	-	-	-	-	-	3	pounds per 100 pieces
" 565,	"	I	"	"	-	-	-	-	$6\frac{1}{2}$	" " " "
" 566,	"	$I\frac{1}{4}$	"	"	-	-	-	-	7	" " " "
" 567,	"	$I\frac{1}{2}$	"	"	-	-	-	-	$7\frac{1}{2}$	" " " "

## SINGLE BODY LOOPS.



No. 569,	for	$\frac{3}{4}$	inch straps,	-	-	-	-	-	$5\frac{1}{4}$	pounds per 100 pieces
" 568,	"	$\frac{7}{8}$	"	"	-	-	-	-	$5\frac{3}{4}$	" " " "
" 575,	"	I	"	"	-	-	-	-	$6\frac{1}{4}$	" " " "
" 576,	"	$I\frac{1}{8}$	"	"	-	-	-	-	8	" " " "
" 570,	"	$I\frac{1}{4}$	"	"	-	-	-	-	$9\frac{1}{2}$	" " " "
" 571,	"	$I\frac{3}{8}$	"	"	-	-	-	-	11	" " " "
" 572,	"	$I\frac{1}{2}$	"	"	-	-	-	-	13	" " " "

## SHAFT LOOPS.



No. 72,	for	$\frac{7}{8}$	inch, square end,	-	-	-	-	-	$3\frac{1}{2}$	pounds per 100 pieces
" 77,	"	$\frac{1}{8}$	" oval	"	-	-	-	-	$5\frac{3}{4}$	" " " "

## DOUBLE PERCH LOOPS.



No. 470,	for	$\frac{3}{4}$	inch straps,	-	-	-	-	-	$6\frac{1}{4}$	pounds per 100
" 471,	"	$\frac{7}{8}$	"	"	-	-	-	-	$9\frac{1}{2}$	" " " "
" 472,	"	I	"	"	-	-	-	-	$12\frac{1}{4}$	" " " "
" 473,	"	$I\frac{1}{8}$	"	"	-	-	-	-	$11\frac{1}{2}$	" " " "
" 474,	"	$I\frac{1}{4}$	"	"	-	-	-	-	23	" " " "
" 475,	"	$I\frac{3}{8}$	"	"	-	-	-	-	26	" " " "
" 476,	"	$I\frac{1}{2}$	"	"	-	-	-	-	32	" " " "



## HOLDBACKS.



No. 577



Nos. 578 579



No. 580

No. 577, - - - - -	-	-	-	-	-	-	-	-	-	14½ pounds per 100
" 578, 6 inches long,	-	-	-	-	-	-	-	-	-	17½ " " "
" 579, 8 " "	-	-	-	-	-	-	-	-	-	23¼ " " "
" 580, 6 " "	-	-	-	-	-	-	-	-	-	31½ " " "

## POLE TIPS.



Nos. 845 846 847



Nos. 458 459 460

Yoke strap collar all round.

Yoke strap collar three-quarters round.

No. 845, 1 inch diameter, 5¼ inches long, - - - -	-	-	-	-	64 pounds per 100
" 846, 1⅛ " " 6 " " - - - -	-	-	-	-	81 " " "
" 847, 1¼ " " 6 " " - - - -	-	-	-	-	93 " " "
" 458, 1⅛ " " 6 " " - - - -	-	-	-	-	82½ " " "
" 459, 1¼ " " 6½ " " - - - -	-	-	-	-	95 " " "
" 460, 1⅝ " " 7 " " - - - -	-	-	-	-	110 " " "

## YOKE TIPS.



With Loop for Strap cast on.

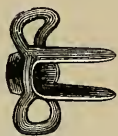
No. 454, ¾ inch diameter, 4 inches long, for 1⅛ inch strap, -	-	-	-	-	26 pounds per 100
" 455, ⅞ " " 4 " " " 1¼ " " -	-	-	-	-	29 " " "
" 456, 1 " " 4 " " " 1½ " " -	-	-	-	-	37½ " " "

## NECK YOKE MIDDLE LOOP.

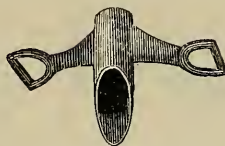


No. 654, 1⅝ inch diameter, - - - - -	-	-	-	-	51 pounds per 100
--------------------------------------	---	---	---	---	-------------------

## POLE CRABS.



Nos. 593 594 595



Nos. 597 598

No. 593,	1	inch eye,	$3\frac{3}{4}$	inches across the bows,	-	-	56	pounds per 100
" 594,	1	"	$4\frac{1}{4}$	"	"	"	78	" " "
" 595,	$1\frac{1}{8}$	"	$4\frac{3}{4}$	"	"	"	116	" " "
" 597,	$1\frac{1}{2}$	"	10	"	"	"	220	" " "
" 598,	$1\frac{1}{4}$	"	12	"	"	"	175	" " "

## SINGLE TREE PINS.



Nos. 602 603



Nos. 602½ 603½



Nos. 604 605



Nos. 607 608



No. 606



Nos. 608½ 609

No. 602,	to screw,	$\frac{3}{8}$	inch diameter,	-	-	-	$7\frac{1}{2}$	pounds per 100
" 603,	"	7-16	"	"	-	-	$8\frac{3}{4}$	" " "
" 602½,	plain,	5-16	"	"	-	-	$8\frac{3}{4}$	" " "
" 603½,	"	$\frac{3}{8}$	"	"	-	-	$9\frac{1}{2}$	" " "
" 604,	"	5-16	"	"	-	-	$9\frac{1}{2}$	" " "
" 605,	"	$\frac{3}{8}$	"	"	-	-	10	" " "
" 607,	"	5-16	"	"	-	-	$8\frac{1}{4}$	" " "
" 608,	"	$\frac{3}{8}$	"	"	-	-	$11\frac{1}{2}$	" " "
" 606,	right or left, in pairs,	$\frac{3}{8}$	inch diameter,	-	-	-	23	pounds per 100 pairs
" 608½,	outside diameter	$1\frac{1}{4}$	inch,	-	-	-	00	pounds per 100
" 609,	"	$1\frac{3}{8}$	"	-	-	-	00	" " "

## SINGLE TREE LOOPS.



No. 615,  $1\frac{1}{4}$  by  $2\frac{3}{4}$  inches, oval, - - - - - 57 pounds per 100 pieces

## SINGLE TREE HOOKS.



No. 611



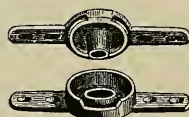
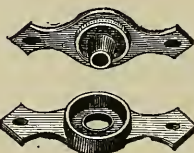
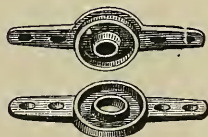
No. 612



No. 613

No. 611,	right or left, in pairs,	$1\frac{1}{4}$ inch diameter,	-	-	75 pounds per 100 pairs
" 612,	" " " "	$1\frac{1}{4}$ " " "	-	-	80 " " " "
" 613,	" " " "	$1\frac{1}{4}$ " " "	-	-	75 " " " "

## SINGLE, or WHIFFLE TREE PLATES.



Nos. 677 678 682 683

Nos. 672 673

No. 428

No. 679

No. 677,	$1\frac{1}{2}$ inch diameter of circle,	-	-	-	22 pounds per 100 pairs
" 678,	$1\frac{3}{4}$ " " "	"	-	-	40 " " " "
" 682,	$2\frac{1}{4}$ " " "	"	-	-	64 " " " "
" 683,	$2\frac{3}{4}$ " " "	"	-	-	78 " " " "
" 672,	deep pattern, $1\frac{1}{2}$ inch diameter of circle,	-	-	-	28 " " " "
" 673,	" " 2 " " "	"	-	-	31 " " " "
" 428,	" " with stop, $1\frac{3}{4}$ inch,	-	-	-	46 " " " "
" 679,	3 by $1\frac{1}{2}$ inch,	-	-	-	39 $\frac{1}{2}$ " " " "

## SINGLE, or WHIFFLE TREE TOP PLATES.



No. 670



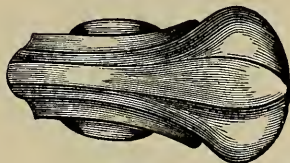
No. 680



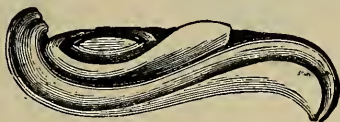
No. 681

No. 670,	5 inches long,	5-16 inch square hole,	-	-	10 pounds per 100
" 680,	4 " " "	5-16 " round " "	-	-	7 $\frac{1}{2}$ " " " "
" 681,	3 " " "	5-16 " " " "	-	-	4 $\frac{1}{2}$ " " " "

## SCROLLS FOR CARRIAGE PARTS.



No. 368



No. 0369



No. 369

No.	368,	2½	inches long,	-	-	-	-	-	-	-	24 pounds per 100
"	369,	3	" "	-	-	-	-	-	-	-	29 " " "
"	369,	3¾	" "	-	-	-	-	-	-	-	38 " " "

### TAIL BOARD NUTS AND PLATES.



No. 650



No. 651

No. 650,	$3\frac{1}{2}$ inches long,	for $\frac{1}{2}$ inch rods,	-	-	-	40	pounds per 100
" 651,	in pairs,	" " "	-	-	-	$32\frac{1}{2}$	" " " pairs

T PLATES.



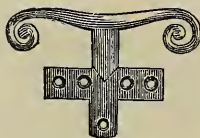
No. 637, rights and lefts, - - - - - 56 pounds per 100 pairs



## WEAR, or RUB IRONS.



No. 383



No. 616



No. 617



No. 618



Nos. 619 620 621 730



No. 623



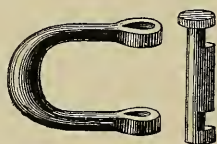
No. 624

No. 383,	6 $\frac{1}{4}$ inches long,	2 inches wide,	-	-	-	-	56 pounds per 100
" 616,	5 $\frac{1}{2}$	" "	-	-	-	-	45 " " "
" 617,	5 $\frac{1}{4}$	" "	-	-	-	-	45 " " "
" 618,	4 $\frac{1}{2}$	" "	-	-	-	-	36 " " "
" 619,	4 $\frac{1}{2}$	" " 1 $\frac{3}{8}$ inch wide,	-	-	-	-	32 $\frac{1}{4}$ " " "
" 620,	5	" " 1 $\frac{3}{8}$ " "	-	-	-	-	37 " " "
" 621,	5 $\frac{1}{2}$	" " 1 $\frac{3}{8}$ " "	-	-	-	-	39 " " "
" 730,	6	" " 3 " "	-	-	-	-	100 " " "
" 623,	6 $\frac{1}{2}$	" "	-	-	-	-	66 " " "
" 624,	5	" "	-	-	-	-	50 " " "

## DOUBLE TREE CLEVIS AND PIN.



No. 656



No. 657

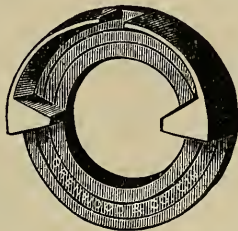
No. 656,	3 inches long,	1 $\frac{5}{8}$ inch open,	-	-	-	-	85 pounds per 100
" 657,	patent,	3 inches long,	1 $\frac{7}{8}$ inch open,	-	-	-	120 " " "

## TRACE HOOKS.



No. 659,	6 inches long,	-	-	-	-	-	30 pounds per 100
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## PATENT AXLE WASHERS.



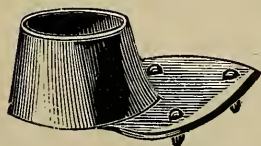
No. 394, $1\frac{1}{2}$ in., $3\frac{1}{2}$ pounds per set of 4	No. 393, $2\frac{1}{4}$ in., 4 pounds per set of 4
" 390, $1\frac{5}{8}$ " $3\frac{1}{2}$ " " " "	" 393 $\frac{1}{2}$ , $2\frac{1}{2}$ " $4\frac{1}{2}$ " " " "
" 391, $1\frac{7}{8}$ " 4 " " " "	" 395, $2\frac{3}{4}$ " 5 " " " "
" 392, 2 " 4 " " " "	

## KETTLE EARS.

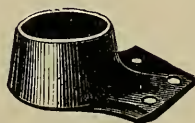


No. 1, square corner, $1\frac{5}{8}$ inch long, $1\frac{1}{2}$ inch high, - $5\frac{1}{2}$ pounds per 100 pieces	
" 2, " " $1\frac{3}{4}$ " " $1\frac{3}{4}$ " " - 9 " " " "	
" 3, " " $1\frac{7}{8}$ " " $2\frac{1}{4}$ " " - 10 " " " "	
" 4, " " $2\frac{1}{4}$ " " $2\frac{5}{8}$ " " - 15 " " " "	
" 5, " " $2\frac{5}{8}$ " " $2\frac{5}{8}$ " " - 22 " " " "	
" 6, " " 3 " " 3 " " - 30 " " " "	
" o, round " $1\frac{3}{4}$ " " $1\frac{3}{4}$ " " - 6 " " " "	
" 7, " " $4\frac{1}{4}$ " " $3\frac{3}{4}$ " " - 56 " " " "	
" 80, " " $4\frac{5}{8}$ " " 4 " " - 61 " " " "	
" 81, " " 5 " " $4\frac{1}{2}$ " " - 82 " " " "	
" 82, " " 5 " " $4\frac{5}{8}$ " " - 88 " " " "	

## HOE EYES.



No. 324



No. 0324

No. 324, $1\frac{3}{8}$ inch diameter of eye, with rivets cast on, - 56 pounds per 100	
" 0324, $1\frac{3}{8}$ " " " " holes for rivets, - 52 " " " "	

# AXLE WRENCHES.

## SQUARE SOCKETS—Three Jaws.



No. 684,	deep sockets, for 1	inch axle nuts,	-	-	-	58 pounds per 100
" 686,	"	" $1\frac{1}{4}$	"	"	-	60 " " "
" 686,	"	" $1\frac{1}{4}$	"	"	-	64 " " "
" 687,	"	" $1\frac{3}{8}$	"	"	-	66 " " "
" 688,	"	" $1\frac{1}{2}$	"	"	-	95 " " "
" 689,	"	" $1\frac{3}{4}$	"	"	-	140 " " "
" 690,	"	" 2	"	"	-	150 " " "

## DEEP SQUARE SOCKETS—One Jaw.



No. 410,	deep sockets, for $\frac{3}{4}$	inch axle nuts,	-	-	-	40 pounds per 100
" 411,	"	" $\frac{7}{8}$	"	"	-	56 " " "
" 412,	"	" 1	"	"	-	60 " " "
" 413,	"	" $1\frac{1}{8}$	"	"	-	70 " " "
" 414,	"	" $1\frac{1}{4}$	"	"	-	75 " " "

## EXTRA DEEP, FOR EXTRA WIDE POINT BANDS.

No. 420,	for $\frac{7}{8}$	inch axle nuts,	-	-	-	60 pounds per 100
" 421,	" 1	"	-	-	-	67 " " "
" 422,	" $1\frac{1}{8}$	"	-	-	-	69 " " "
" 423,	" $1\frac{1}{4}$	"	-	-	-	71 " " "

## HEXAGON—Three Jaws.



No. 691,	for $1\frac{1}{8}$	inch hexagon nuts,	-	-	-	70 pounds per 100
" 692,	" $1\frac{1}{4}$	"	-	-	-	72 $\frac{1}{2}$ " " "
" 693,	" $1\frac{3}{8}$	"	-	-	-	75 " " "
" 694,	" $1\frac{1}{2}$	"	-	-	-	82 " " "

## WRENCHES.



No. 698, 11 inches long, for  $\frac{1}{2}$  to  $1\frac{1}{2}$  inch nuts, - 125 pounds per 100 pieces  
 " 699, 13 " "  $\frac{1}{2}$  to  $1\frac{3}{4}$  " " - 175 " " " "



No. 696, for  $\frac{1}{2}$  to 1 inch nuts, - - - - - 82 pounds per 100



No. 700, for  $\frac{1}{2}$  inch nuts, - - - - - 55 pounds per 100

## THUMB NUTS.



Nos. 660 661 662



Nos. 663 666



Nos. 664 665

No. 660, 1 inch across wings, no hole, - - - - 2 pounds per 100  
 " 661,  $1\frac{1}{2}$  " " " 3-16 inch hole, - - - 4 " " "  
 " 662, 2 " " "  $\frac{1}{4}$  " " - - -  $7\frac{3}{4}$  " " "  
 " 663,  $1\frac{1}{2}$  " " "  $\frac{1}{4}$  " " - - -  $4\frac{1}{4}$  " " "  
 " 666,  $1\frac{7}{8}$  " " "  $\frac{3}{8}$  " " - - -  $8\frac{1}{2}$  " " "  
 " 664, 2 " " "  $\frac{1}{4}$  " " - - -  $9\frac{1}{2}$  " " "  
 " 665, 3 " " " 5-16 " " - - -  $17\frac{1}{2}$  " " "

## DUFF TAILS.



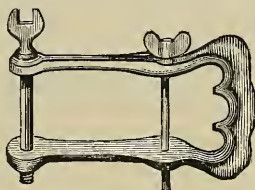
No. 346, in pairs, - - - - - 20 pounds per 100 pairs



# MALLEABLE PLOW CLEVISES.

ALL STRAIGHTENED AND TAPPED READY FOR USE.

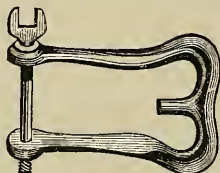
## NEW PATTERN CLEVISES.



**Ribbed Shank, giving Increased Strength with Less Weight.**

- No. 705, 2 in. between shanks;  $5\frac{1}{2}$  in. long; wrench fits nuts  $\frac{7}{8}$  in. square;  
weight, with guide pin and wrench, - - - 125 pounds per 100
- No. 706,  $2\frac{1}{4}$  in. between shanks;  $5\frac{3}{4}$  in. long; wrench fits nuts  $\frac{7}{8}$  in. square;  
weight, with guide pin and wrench, - - - 94 pounds per 100
- No. 708,  $2\frac{3}{8}$  in. between shanks;  $6\frac{1}{4}$  in. long; wrench fits nuts  $\frac{7}{8}$  in. square;  
weight, with guide pin and wrench, - - - 156 pounds per 100
- No. 710,  $2\frac{1}{2}$  in. between shanks;  $6\frac{1}{4}$  in. long; wrench fits nuts  $1\frac{1}{8}$  in. square;  
weight, with guide pin and wrench, - - - 187 pounds per 100
- No. 713,  $2\frac{5}{8}$  in. between shanks;  $6\frac{3}{4}$  in. long; wrench fits nuts  $\frac{7}{8}$  in. square;  
weight, with guide pin and wrench, - - - 231 pounds per 100
- No. 715,  $2\frac{3}{4}$  in. between shanks;  $6\frac{1}{2}$  in. long; wrench fits nuts  $1\frac{1}{8}$  in. square;  
weight, with guide pin and wrench, - - - 187 pounds per 100
- No. 717, 3 in. between shanks;  $6\frac{1}{2}$  in. long; wrench fits nuts  $1\frac{1}{8}$  in. square;  
weight, with guide pin and wrench, - - - 200 pounds per 100

## COTTON PLOW CLEVISES.

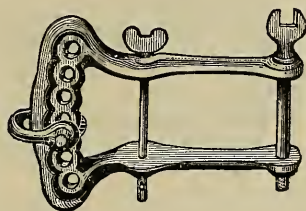


- No. 637,  $2\frac{1}{8}$  in. between shanks;  $4\frac{5}{8}$  in. long; wrench fits nuts 1 in.; weight,  
with wrench, - - - 100 pounds per 100
- No. 639,  $2\frac{1}{2}$  in. between shanks;  $5\frac{5}{8}$  in. long; wrench fits nuts  $\frac{7}{8}$  in.; weight,  
with wrench, - - - 150 pounds per 100
- No. 642,  $2\frac{3}{4}$  in. between shanks;  $4\frac{3}{4}$  in. long; wrench fits nuts  $1\frac{1}{4}$  in.; weight,  
with wrench, - - - 125 pounds per 100

# MALLEABLE PLOW CLEVISES.

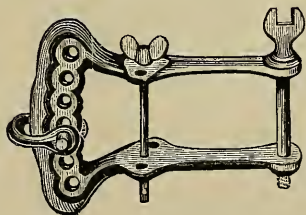
ALL STRAIGHTENED AND TAPPED READY FOR USE.

## HALF SCOTCH CLEVISES—Ribbed Shank.



- No. 720,  $2\frac{1}{2}$  in. between shanks;  $6\frac{3}{4}$  in. long; wrench fits nuts  $\frac{7}{8}$  in. square; weight, with loop and pin, guide pin and wrench, - 281 pounds per 100
- No. 724,  $2\frac{3}{4}$  in. between shanks;  $7\frac{1}{2}$  in. long; wrench fits nuts  $\frac{7}{8}$  in. square; weight, with loop and pin, guide pin and wrench, - 406 pounds per 100
- No. 726, 3 in. between shanks;  $8\frac{1}{4}$  in. long; wrench fits nuts  $1\frac{1}{8}$  in. square; weight, with loop and pin, guide pin and wrench, - 531 pounds per 100

## SCOTCH CLEVISES—Rock Island Pattern.

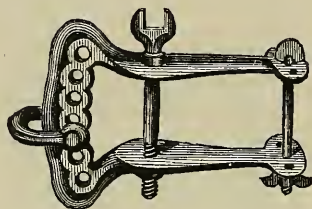


- No. 729,  $2\frac{3}{4}$  in. between shanks;  $6\frac{1}{2}$  in. long; wrench fits nuts  $1\frac{1}{8}$  in. square; weight, with loop and pin, guide pin with thumb nut and wrench, 325 pounds per 100
- No. 731, 3 in. between shanks;  $8\frac{1}{4}$  in. long; wrench fits nuts  $1\frac{1}{8}$  in. square; weight, with loop and pin, guide pin with thumb nut and wrench, 520 pounds per 100
- No. 732,  $3\frac{1}{4}$  in. between shanks;  $8\frac{1}{4}$  in. long; wrench fits nuts  $1\frac{1}{8}$  in. square; weight, with loop and pin, guide pin with thumb nut and wrench, 531 pounds per 100

# MALLEABLE PLOW CLEVISES.

ALL STRAIGHTENED AND TAPPED READY FOR USE

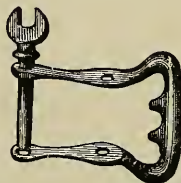
## BREAKER PLOW CLEVISES.



No. 734,  $2\frac{3}{4}$  in. between shanks;  $7\frac{3}{4}$  in. long; wrench fits nuts  $1\frac{1}{4}$  in. square; weight, with guide pin, with thumb nut and wrench, 388 pounds per 100

No. 735, 3 in. between shanks;  $8\frac{1}{4}$  in. long; wrench fits nuts  $1\frac{1}{8}$  in. square; weight, with guide pin, with thumb nut and wrench, 513 pounds per 100

## OLD PATTERN CLEVISES.



Half Oval Shanks.

No. 599, 2 in. between shanks; length, 6 in.; wrench fits nuts  $\frac{5}{8}$  in. square; weight, with guide pin and wrench, - - - 150 pounds per 100

No. 599 $\frac{1}{2}$ ,  $2\frac{1}{4}$  in. between shanks; length, 6 in.; wrench fits nuts  $\frac{5}{8}$  in. square; weight, with guide pin and wrench, - - - 156 pounds per 100

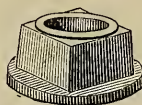
No. 600,  $2\frac{3}{8}$  in. between shanks; length, 6 in.; wrench fits nuts  $1\frac{1}{4}$  in. square; weight, with guide pin and wrench, - - - 200 pounds per 100

No. 600 "A,"  $2\frac{1}{2}$  in. between shanks; length,  $6\frac{5}{8}$  in.; wrench fits nuts  $1\frac{1}{4}$  in. square; weight, with guide pin and wrench, - 275 pounds per 100

No. 600 "D,"  $2\frac{3}{4}$  in. between shanks; length,  $6\frac{5}{8}$  in.; wrench fits nuts  $1\frac{1}{4}$  in. square; weight, with guide pin and wrench, - 275 pounds per 100

No. 600 "E," 3 in. between shanks; length,  $6\frac{5}{8}$  in.; wrench fits nuts  $1\frac{1}{4}$  in. square; weight, with guide pin and wrench, - 275 pounds per 100

# MALLEABLE AXLE NUTS.



For Axles.	Size of Square.	Size of Flange.	Thickness of Nut.	Size of Hole.	Weight of 100 Pieces.
1 { $\frac{7}{8}$ inch	1 inch	$1\frac{3}{4}$ by 3-16 inch	$\frac{7}{8}$ inch	11-16 inch	25 pounds
1 { 1 " "	1 " "	$1\frac{3}{4}$ by 3-16 " "	$\frac{7}{8}$ " "	11-16 " "	25 " "
2 { $1\frac{1}{8}$ " "	$1\frac{1}{8}$ " "	1 15-16 by 3-16 " "	15-16 " "	13-16 " "	33 " "
3 { $1\frac{1}{4}$ " "	$1\frac{1}{4}$ " "	$2\frac{1}{4}$ by 3 16 " "	1 " "	13-16 " "	46 " "
4 { $1\frac{3}{8}$ " "	$1\frac{3}{8}$ " "	$2\frac{3}{8}$ by $\frac{1}{4}$ " "	$1\frac{1}{8}$ " "	15-16 " "	55 " "
5 { $1\frac{1}{2}$ " "	$1\frac{1}{2}$ " "	2 7-16 by $\frac{1}{4}$ " "	1 3-16 " "	1 " "	60 " "
6 { $1\frac{5}{8}$ " "	$1\frac{5}{8}$ " "	$2\frac{3}{4}$ by 5-16 " "	$1\frac{1}{4}$ " "	$1\frac{1}{8}$ " "	90 " "
7 { $1\frac{3}{4}$ " "	$1\frac{3}{4}$ " "	$2\frac{7}{8}$ by $\frac{3}{8}$ " "	$1\frac{3}{8}$ " "	$1\frac{1}{8}$ " "	120 " "
7 { $1\frac{7}{8}$ " "	$1\frac{7}{8}$ " "	$2\frac{7}{8}$ by $\frac{3}{8}$ " "	$1\frac{3}{8}$ " "	$1\frac{1}{8}$ " "	120 " "
8 { 2 " "	2 " "	$3\frac{3}{4}$ by $\frac{3}{8}$ " "	$1\frac{5}{8}$ " "	$1\frac{3}{8}$ " "	180 " "
8 { $2\frac{1}{4}$ " "	$2\frac{1}{4}$ " "	$3\frac{3}{4}$ by $\frac{3}{8}$ " "	$1\frac{5}{8}$ " "	$1\frac{3}{8}$ " "	180 " "
9 { $2\frac{1}{2}$ " "	$2\frac{1}{2}$ " "	$3\frac{3}{4}$ by $\frac{3}{8}$ " "	$1\frac{7}{8}$ " "	$1\frac{1}{2}$ " "	215 " "
9 { $2\frac{3}{4}$ " "	$2\frac{1}{2}$ " "	$3\frac{3}{4}$ by $\frac{3}{8}$ " "	$1\frac{7}{8}$ " "	$1\frac{1}{2}$ " "	215 " "
9 { 3 " "	$2\frac{1}{2}$ " "	$3\frac{3}{4}$ by $\frac{3}{8}$ " "	$1\frac{7}{8}$ " "	$1\frac{1}{2}$ " "	215 " "

We furnish any of the above nuts turned and tapped as described below; if a nut for any sized axle is ordered, we will presume it is our regular size (we make no others), and if it does not fit, the responsibility of the failure is not ours.

Size of Axle, inch,	$\frac{7}{8}$ 1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{5}{8}$	$1\frac{3}{4}$	$1\frac{7}{8}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3
Size of Tap, " "	13-16	15-16	15-16	33-32	$1\frac{1}{8}$	41-32	41-32		$1\frac{1}{2}$		$1\frac{3}{4}$		
Threads per " "	10	9	9	8	8	8	8		6		5		
Price, each,	15	18	23	25	30	38	50		67		83 cts.		

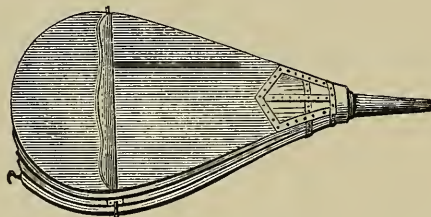


**C. L. ENGLISH'S**  
**PRICE LIST OF**  
**BLACKSMITHS' BELLOWS, PORTABLE FORGES**  
 — AND —  
**MOULDERS' BELLOWS,**

**129 WEST SECOND STREET, CINCINNATI, OHIO.**

**C. L. ENGLISH'S IMPROVED BELLOWS.**

Patented November 19th, 1867.



**BLACKSMITHS' BELLOWS.**

28 inch, extra long, - -	\$18 00	40 inch, extra long, - -	\$30 00
30 " " " - -	19 00	42 " " " - -	35 00
32 " " " - -	20 50	44 " " " - -	40 00
34 " " " - -	22 00	46 " " " - -	44 00
36 " " " - -	23 50	48 " " " - -	49 00
38 " " " - -	26 50	50 " " " - -	57 00

**"STAR" BRAND BLACKSMITHS' BELLOWS.**

32 inch, extra long, - -	\$18 75	38 inch, extra long, - -	\$24 50
34 " " " - -	20 00	40 " " " - -	27 50
36 " " " - -	21 50		

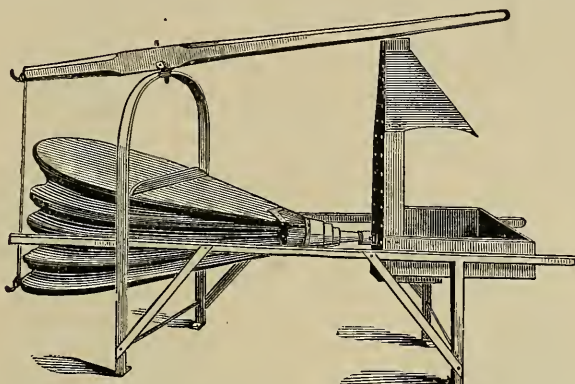
**MOULDERS' BELLOWS.**

8 inch, -	\$1 20	10 inch, -	\$1 50	10 inch, extra, -	\$2 00
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**HAND BELLOWS—Extra Large.**

12 inch, extra, - - -	\$2 75	14 inch, extra, - - -	\$3 50
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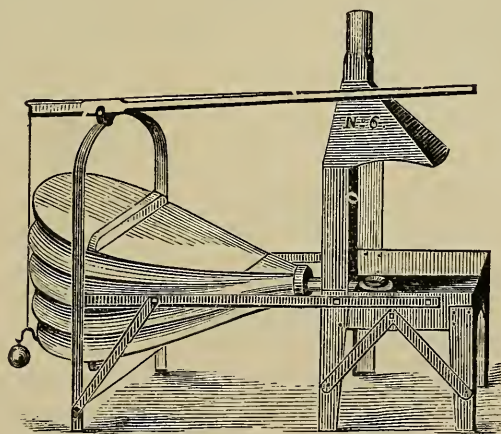
## C. L. ENGLISH'S IMPROVED PORTABLE FORGES.



LONG PORTABLE FORGES—Iron Frame.

No. 1. 26 inch bellows, - \$41 00 | No. 2. 28 inch bellows, - \$43 00

These Forges have iron frames, with large capacity for heating, and are compact and portable, and can be used for out-door work and with safety in-doors. They are the best in use for boiler makers, steamboats, railroad companies, contractors, gunboats, etc.



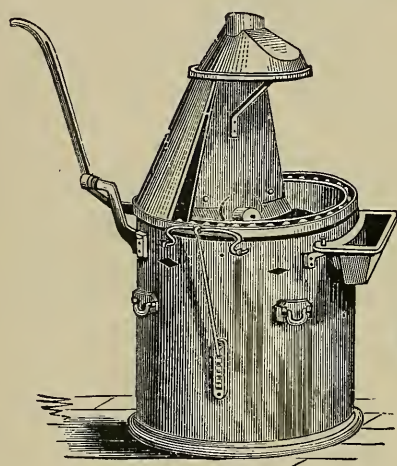
LONG PORTABLE FORGES—Iron Frame.

Nos.	Length.	Width.	Hight.	Weight.	Bellows.	Price.
4	5 ft. 10 in.	2 ft. 8½ in.	4 ft. 6 in.	105	30 in.	\$40 00
5	5 ft. 10 in.	3 ft.	4 ft. 7 in.	205	33 in.	42 00
6	6 ft. 6 in.	3 ft. 3 in.	4 ft. 8 in.	235	36 in.	45 00

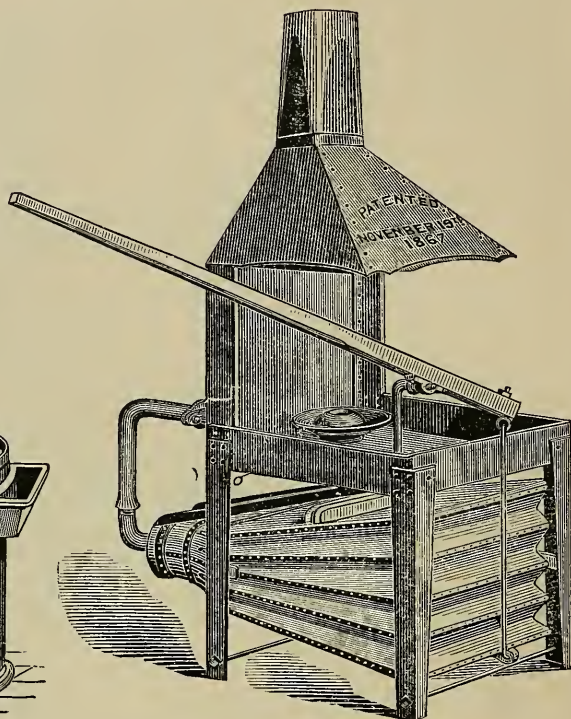
These Forges have a large capacity for heating, and are well adapted for blacksmiths, shipping, steamboats, plantations, manufactories, machine shops, coppersmiths, miners and oil companies.

They can be taken apart or put together in 10 minutes by any person.

## C. L. ENGLISH'S IMPROVED PORTABLE FORGES.



Round Portable Forge.



Short Portable Forge.

## ROUND PORTABLE FORGES.

Nos.	Weight.	Diameter.	Hight.						Price.
1	208	2 feet.	4 feet 2 inches,	-	-	-	-	-	\$36 00
2	250	2 ft. 3 in.	4 feet 6 inches,	-	-	-	-	-	40 00

These are the best forges for gunsmiths, contractors on public works, armories, gas fitters, dentists, jewelers, optical instrument makers, and the U. S. Army.

## SHORT PORTABLE FORGE.

No.	Length.	Width.	Hight.	Weight.	Price.
7	3 ft. 6 in.	2 ft.	6 ft.	170 lbs.	\$38 00

This Forge has the bellows under the fire box, which makes it short, light and cheap. It has the Improved Patent Duck Nest Tweer Iron, with slide in the bottom to let out c'nders and ashes, and keeps it from melting the top of the Tweer Iron. It is well adapted to any kind of light work.

# CINCINNATI FORGING CO.

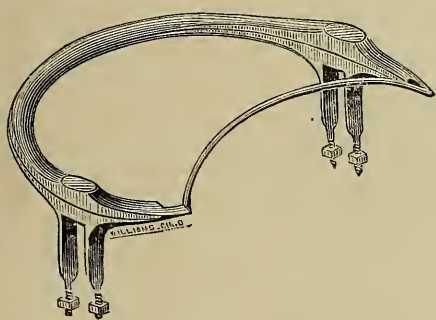
OFFICE at No. 37 MAIN STREET, CINCINNATI, O.

H. NEAVE, President.

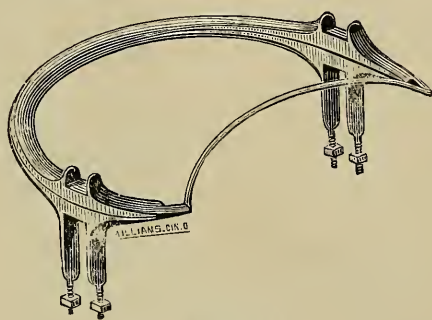
FACTORY at AMELIA, CLERMONT CO., O.

WILLIAMS & SHORT, Sup'ts.

## CINCINNATI FIFTH WHEELS.



Plain.



With Flanges.

### ALL DIAMETERS, PLAIN.

Size of Iron,	$\frac{5}{8}$	11-16	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$ in.
Per dozen,	\$16 00	17 00	18 00	24 00	28 80	35 00

### ALL DIAMETERS, WITH FLANGES.

Size of Iron,	$\frac{5}{8}$	11-16	$\frac{3}{4}$ in.
Per dozen,	\$19 00	20 00	21 00

The following sizes are manufactured:

Of  $\frac{5}{8}$  in. half round iron; 12, 13, 14, 15 in. outside diameter, for  $\frac{7}{8}$ , 1 or  $1\frac{1}{8}$  axles.

Of  $\frac{3}{4}$  in. half round iron; 12, 13, 14, 15, 16 in. diameter, for 1,  $1\frac{1}{8}$  or  $1\frac{1}{4}$  axles.

Of  $\frac{7}{8}$  in. half round iron; 14, 15, 16 in. diameter, for  $1\frac{1}{8}$ ,  $1\frac{1}{4}$ ,  $1\frac{3}{8}$  or  $1\frac{1}{2}$  axles.

Of 1 in. half round iron; 14, 15, 16 in. diameter, for  $1\frac{3}{8}$ ,  $1\frac{3}{4}$  or  $1\frac{1}{2}$  axles.

Of  $1\frac{1}{8}$  in. half round iron; 15, 16 in. diameter, for  $1\frac{3}{8}$ ,  $1\frac{1}{2}$ , or  $1\frac{3}{4}$  axles.

In ordering give the size of half round iron the wheel is made of, the outside diameter of circle, and the size of axle.

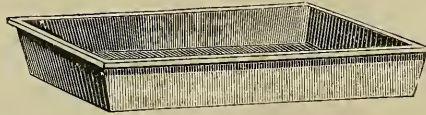


## WELL PULLEYS.



8 inch,	-	-	-	-	-	-	-	-	-	-	per dozen, \$6 50
10 "	-	-	-	-	-	-	-	-	-	-	" 7 50
12 "	-	-	-	-	-	-	-	-	-	-	" 9 00
14 "	-	-	-	-	-	-	-	-	-	-	" 14 50
12 " extra heavy,	-	-	-	-	-	-	-	-	-	-	" 18 00
20 " "	-	-	-	-	-	-	-	-	-	-	" 72 00

## SINKS.



20 by 14 inches,	-	-	-	-	-	-	-	-	-	-	each, \$2 10
24 by 16 "	-	-	-	-	-	-	-	-	-	-	" 2 40
30 by 18 "	-	-	-	-	-	-	-	-	-	-	" 3 20
36 by 18 "	-	-	-	-	-	-	-	-	-	-	" 4 50
38 by 20 "	-	-	-	-	-	-	-	-	-	-	" 5 60
42 by 22 "	-	-	-	-	-	-	-	-	-	-	" 6 00
48 by 23 "	-	-	-	-	-	-	-	-	-	-	" 7 15
Legs for 30, 36, 38, 42 and 48 inches,	-	-	-	-	-	-	-	-	-	-	" 60
No. 1, Corner Sinks,	-	-	-	-	-	-	-	-	-	-	" 1 80
" 2, "	-	-	-	-	-	-	-	-	-	-	" 2 25
" 3, "	-	-	-	-	-	-	-	-	-	-	" 2 85
Slop Sinks, 24 by 20, 12 inches deep,	-	-	-	-	-	-	-	-	-	-	" 5 60

The above prices are for plain castings: if painted, add 10 per cent. to price.

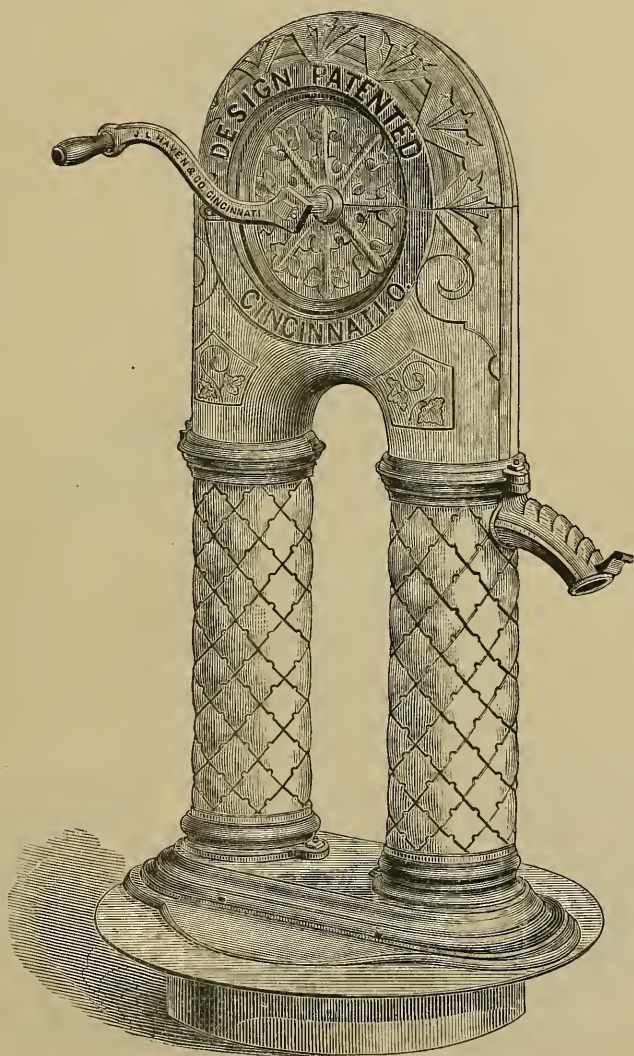
## TRUNK ROLLERS.



Polished, to nail, - - - - - per gross, \$1 50

# IRON CHAIN PUMP CURB NO. 1.

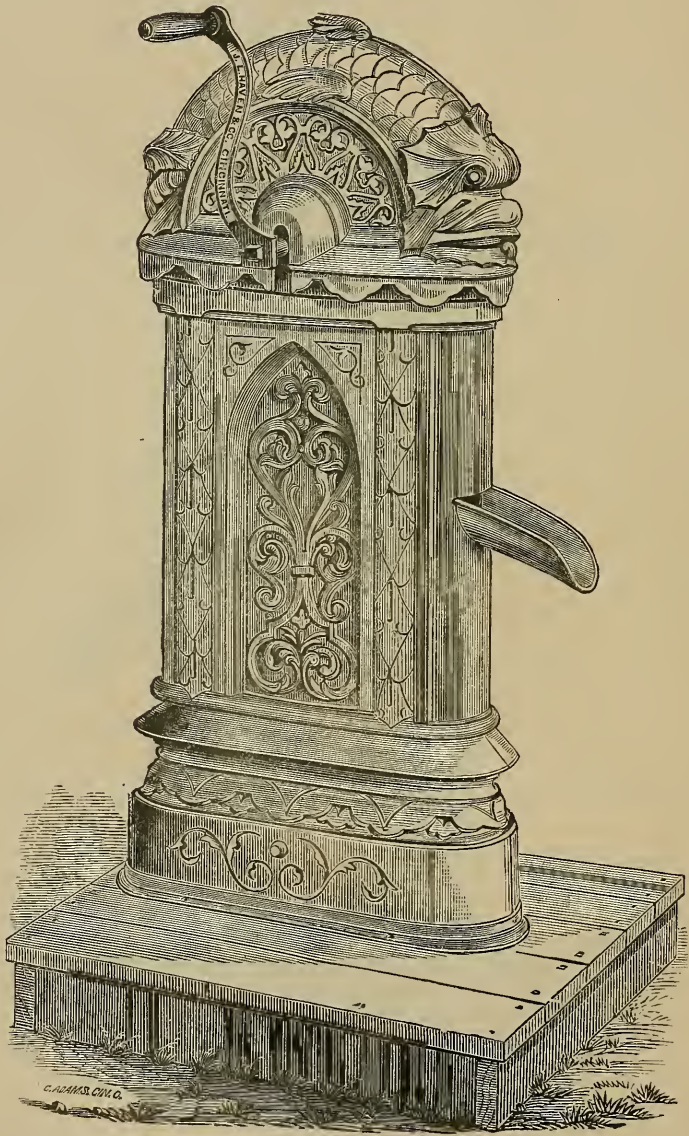
(Represented with Iron Cistern Cover attached.)



Each, complete, with Reel, - - - - -	\$9 00
" fitted to Iron Cistern Cover, - - - - -	14 00
" " " Wood Platform, - - - - -	10 00

# IRON CHAIN PUMP CURB NO. 2.

( Represented with Wood Platform.)



Each, complete, with Reel, - - - - -	\$9 00
“ fitted to Iron Cistern Cover, - - - - -	14 00
“ “ “ Wood Platform, - - - - -	10 00

## CHAIN PUMPS.

We make a specialty of CHAIN PUMPS, manufacturing all the parts, which we warrant to be of the best quality.

Our IRON CURBS are of new and very handsome designs, and we place them at prices which we think will be satisfactory.


### CHAIN PUMP CURBS.



No. 1, iron, complete, with reel, - - - - - each, \$9 00



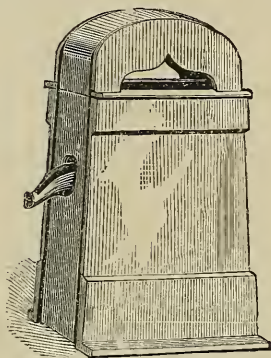
No. 2, iron, complete, with reel, - - - - - each, \$9 00

 Nos. 1 & 2 Iron Curbs we furnish fitted on a 16 inch cistern cover (page 42), forming, with the accompanying ring, a complete, convenient, and durable arrangement, at no greater cost than a wooden platform, which sooner or later rots and gives trouble.

Price, with cover and ring, - - - - - each, \$14 00

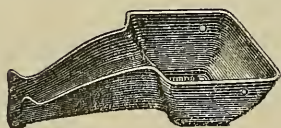


## CHAIN PUMP CURBS.



No. 3, wood, with iron spout, without fixtures, - - - - each, \$2 50

## SPOUTS FOR WOOD CURBS.



No. 1, Japanned, - per dozen, \$4 80 | No. 2, Japanned, - per dozen, \$4 80

## GALVANIZED PUMP CHAIN.

1  $\frac{1}{4}$  inch, - - - - - per pound, 16 cents  
 1  $\frac{1}{2}$  " - - - - - " 16 "

Made of No. 5 wire, weighs 45 lbs. to the 100 feet; tied in bundles of 36 feet, weighing about 16 lbs. A cask of it weighs about 525 lbs.

## BORED TUBING.

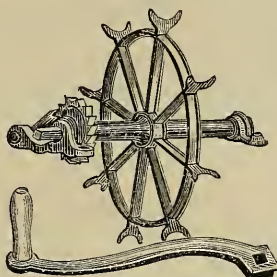
In Assorted Lengths, mostly Eight Feet.

Poplar, - - - - - per foot, 6  $\frac{1}{2}$  cents  
 Pine, - - - - - " 7  $\frac{1}{2}$  "

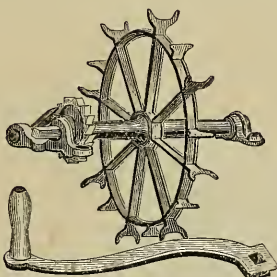
In retailing there need be no loss whatever. Drive the sockets together, and saw off the exact length required. With a little care, you need make no "short ends" at all.

## CHAIN PUMP REELS or FIXTURES.

Designs Patented.



- No. 1, 8 forks, complete, with wood rollers, 25 sets in a barrel; weight, 300 pounds, - - - - - per set, \$1 05
- No. 2, 8 forks, complete, with iron rollers, 25 sets in a barrel; weight, 310 pounds, - - - - - per set, \$1 10



- No. 3, 16 forks, complete, with wood rollers, 25 sets in a barrel; weight, 325 pounds, - - - - - per set, \$1 15
- No. 4, 16 forks, complete, with iron rollers, 25 sets in a barrel; weight, 335 pounds, - - - - - per set, \$1 20

## BOTTOM ROLLERS.



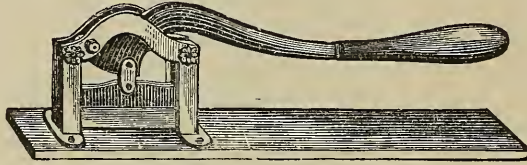
Wood.



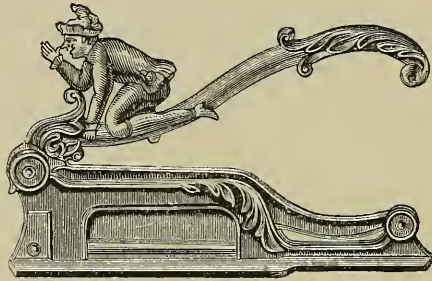
Iron.

Per dozen, - - - - \$1 00 | Per dozen, - - - - \$1 60

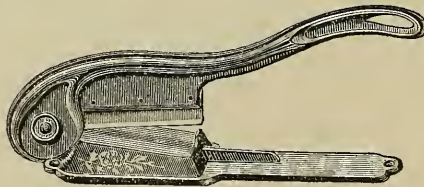
# TOBACCO CUTTERS.



No. 1, Japanned, - - - - - per dozen, \$8 00

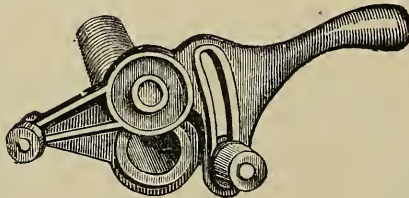


No. 2, Bronzed, with image. - - - - - per dozen, \$10 00  
 " 3, " without image, - - - - - " 9 00



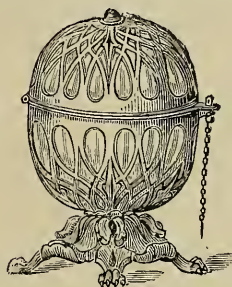
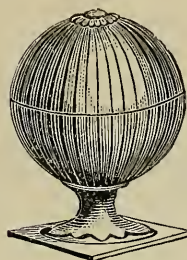
No. 4, Bronzed, - - - - - per dozen, \$7 00

## MOLASSES GATES.

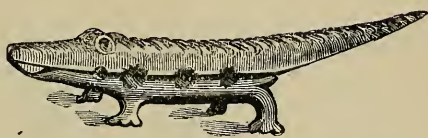
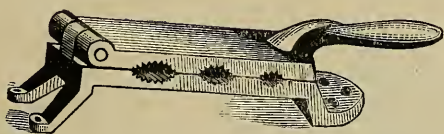


No. 1, - - - - - per dozen, \$7 00  
 " 2, - - - - - " 8 00  
 " 3, - - - - - " 9 00  
 " 4, - - - - - " 10 00

TWINE BOXES.



CORK PRESSES.



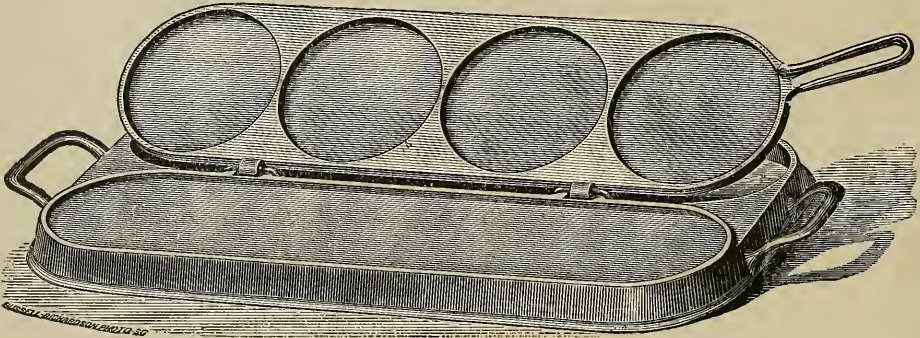
SHOE HAMMERS.



" 2, " " " - - - " I 44



PATENT REVERSIBLE GRIDDLE.



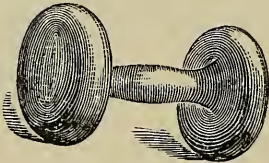
By means of this invention, the task of preparing *hot cakes for breakfast* is rendered a pleasant pastime. The work is done in a manner that renders the Griddle an indispensable utensil for the kitchen.

It cooks eight at a time, and better than in any other way. It secures uniformity of size in the cakes, turns them without the use of a knife, bakes and browns them with much *greater rapidity* than the common griddle of greater surface.

DIRECTIONS FOR USE.—Do not remove the lids of the stove; set the Griddle on top, its air chamber retains the heat; it will fit all Stoves and Ranges. Turn the reversible part and allow it to *fall* upon the stationary part—return to its place, and fill with batter while the others are cooking.

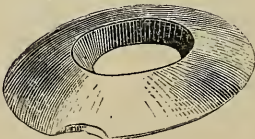
Per dozen, - - - - - \$15 00

DUMB BELLS—Japanned.



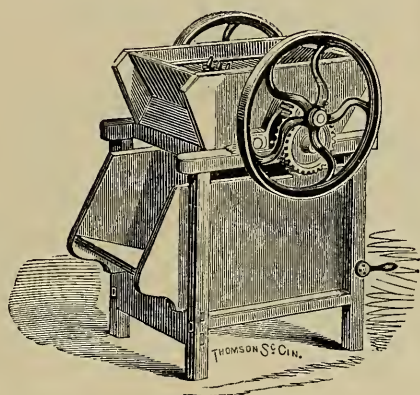
Nos.	1	2	3	4	5	6	7	8	9	10	11	12
Pounds,	9	12	17	21	24	29	38	46	52	66	85	100
Per pair, \$	0 90	1 20	1 70	2 10	2 40	2 90	3 80	4 00	5 50	6 60	8 50	10 00

QUOITS.



Japanned, - - - - - per pound, 10 cents

# GROCCERS' SUGAR MILLS.



We manufacture an improved mill for crushing or lightening heavy, lumpy sugar, which is a most valuable machine for wholesale grocers' use, in preparing sugar for barreling, on removal from the original packages, or for retailers who desire to mix different grades together, or to enliven and disintegrate the particles of such as they are offering for sale daily to their customers.

Price, each, - - - - - \$40 00

## NAIL GRIPS.



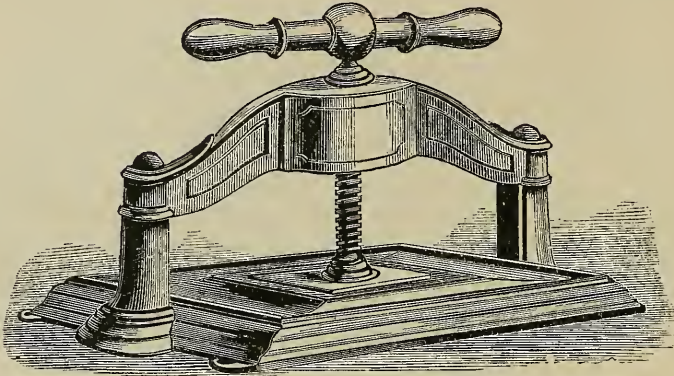
Per dozen, - - - \$9 00 | Per dozen, - - - \$18 00

## COTTON HOOKS.



Red River,	- - - - -	per dozen,	\$3 60
New Orleans,	- - - - -	"	3 60

# COPYING PRESSES.



**No. 3. FOR LETTER, POST OR CAP PAPER.**

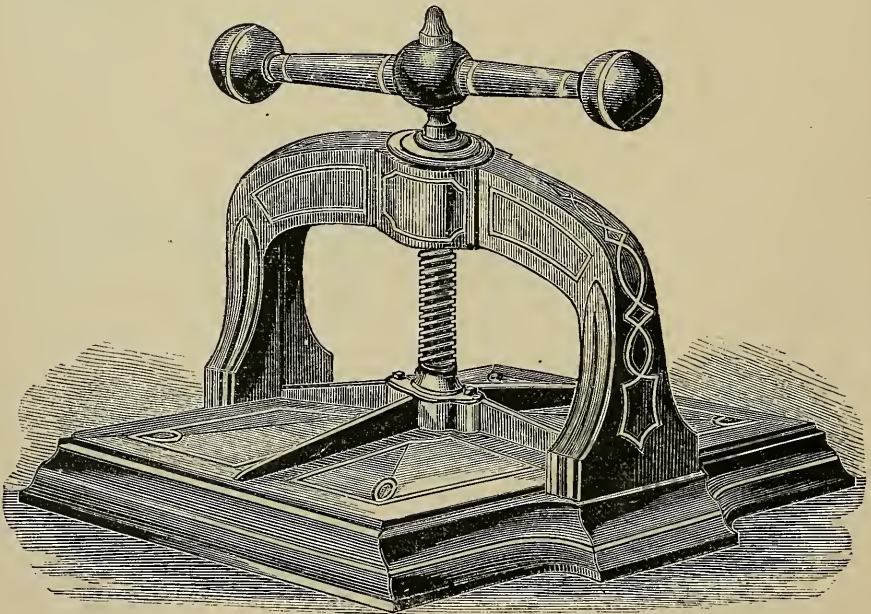
Double threaded ; wrought screw ; platen, 10 by 16 inches ; weight, 95 pounds.

Price, each, - - - - - \$10 00

**No. 4. FOR LETTER OR POST PAPER.**

Double threaded ; wrought screw ; platen, 10 by 13 inches ; weight, 65 pounds.

Price, each, - - - - - \$7 50



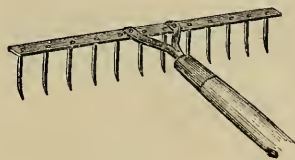
**No. 2. FOR RAILROAD AND EXPRESS MANIFESTS.**

Wrought screw ; very strong ; weight, 000 pounds ; platen, 17 by 20 inches.

Price, each, - - - - - \$38 00



## GARDEN RAKES.



**WROUGHT.**

[illegible]

## MALLEABLE GARDEN RAKES.



10 teeth, Malleable, handled,	-	-	-	-	-	-	per dozen, \$4	55
12 " " "	-	-	-	-	-	-	"	5 75
14 " " "	-	-	-	-	-	-	"	6 25

## GARDEN HOES.



3	pronged, steel blades, handled,	-	-	-	-	-	-	per dozen, \$4	50
4	“ “ “	-	-	-	-	-	-	“	4 80
5	“ “ “	-	-	-	-	-	-	“	6 00
3	“ Malleable,	“	-	-	-	-	-	“	2 70
4	“ “ “	“	-	-	-	-	-	“	3 20
5	“ “ “	“	-	-	-	-	-	“	3 70

## MALLEABLE MANE COMBS.



Japanned, - - - - - per dozen, 50 cents



## WEDGES.



Woodchopper's Wedges, assorted, fluted, - - - per pound, 8 cents

## CROWBARS.



Steel point, hammered Wedge, and pinch point, - - - per pound, 8 cents

## OPEN LINKS.



## WROUGHT IRON.

Nos.	0	1	2	3	4
Per dozen,	\$0 55	65	90	1 25	1 50

## PIKE HAMMERS.



Per pound, - - - - - 20 cents

## STONE CRACKERS.



Per dozen, - - - - - \$8 00

## GRAPE PRUNING SHEARS.



No. 1,	-	-	-	-	-	-	-	-	-	per dozen, \$13 50
" 2,	-	-	-	-	-	-	-	-	-	" 12 00

## SHEEP SHEARS AND MULE SHEARS.



## STRAIGHT HANDLED SHEEP SHEARS.

No. 1,	-	-	-	-	-	-	-	-	-	per dozen, \$12 75
" 2,	-	-	-	-	-	-	-	-	-	" 11 50
" 3,	-	-	-	-	-	-	-	-	-	" 10 20

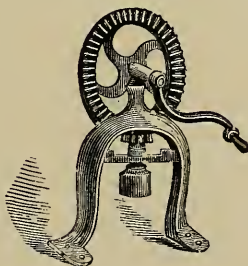
## TROWEL HANDLED SHEEP SHEARS.

No. 1,	-	-	-	-	-	-	-	-	-	per dozen, \$12 75
" 2,	-	-	-	-	-	-	-	-	-	" 11 50
" 3,	-	-	-	-	-	-	-	-	-	" 10 20

## MULE SHEARS.

Per dozen,	-	-	-	-	-	-	-	-	-	\$10 20
------------	---	---	---	---	---	---	---	---	---	---------

## CHURN GEARING.



No. 1, 6 inch wheel, 1½ inch pinions,	-	-	-	-	-	per set, \$1 10
" 2, 6 " " 2 " " " " " " " " " "	-	-	-	-	-	" 1 20
" 3, 9 " " 2 " " " " " " " " " "	-	-	-	-	-	" 2 00

Complete, with Handles, Hooks and Eyes, Ferrule and Step.

We have a great variety of Patterns, and on receipt of a sketch can probably furnish any sort wanted.

MEAT HOOKS.



Nos.	0	1	2	3	4	5	
Japanned,	\$2 40	2 65	3 00	3 75	5 25	6 75	per gross.
Tinned,	2 75	3 00	3 75	5 25	6 75	9 00	"

AWNING HOOKS.



2	2½	3	3½	4	4½	5	inches.
\$1 75	2 00	2 25	2 50	2 75	3 25	4 25	per gross.

SELF-CLINCHING FENCE STAPLES.



1¼ and 1½ inch staple, about ½ gross to pound, - - per pound, 12½ cents

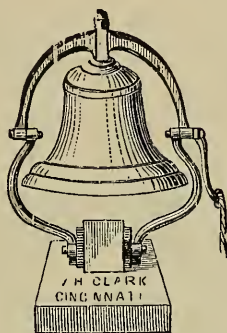
FENCE AND TRELLIS WIRE.

Nos.	8 & 9	10 & 11	12
Per pound, 10		11	11½ cents.

FENCE WIRE TABLE.

No.	Weight per rod of 16½ feet.	Weight of one mile.	Length of a 63-lb. bundle.	Length of 100 pounds.	Length of a ton.
7, 1	pound 9 ounces,	461 pounds,	239 yards,	380 yards,	7600 yards.
" 8, 1	" 4 "	389 "	286 "	456 "	9120 "
" 9, 1	" " "	323 "	342 "	543 "	10860 "
" 10,	" 14 "	264 "	420 "	667 "	13340 "
" 11,	" 10 "	211 "	529 "	840 "	16800 "
" 12,	" 8 "	163 "	700 "	1111 "	22220 "
" 14,	" 5 "	97 "	1142 "	1813 "	36260 "
" 16,	" 3 "	57 "	1954 "	3100 "	62000 "

## STEEL COMPOSITION BELLS.



Mounted in this Style, for Farmers, etc.

We take pleasure in directing attention to our cheap and superior Church, School, Steamboat, and Farm Bells, which are offered at about one-fourth the price of those of like weights of bell-metal, and less than half the price of steel bells.

They are cast of a composition very carefully selected for the purpose, off of patterns which have been used for years—thousands having been cast and sold, to the universal satisfaction of the purchasers.

We do not claim that they are equal or superior to bell-metal Bells, at *four* times the price per pound; but, *for the money*, we can furnish you a more satisfactory Bell than the same amount will purchase of *any other material*.

We can also supply our customers with all sizes of Bells made of the best bell-metal, and warranted unsurpassed in tone and finish.

Having succeeded to the business of the AMERICAN BELL COMPANY, all orders should now be addressed to us.

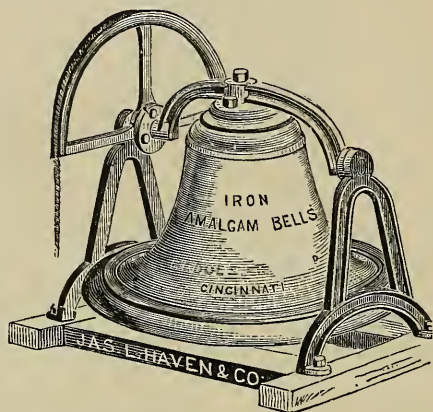
Our reputation, we trust, for furnishing goods equal to our recommendation, stands fair; and we ask you, if in need of Bells, to give us your orders.

## IN THESE WEIGHTS THE MOUNTINGS ARE INCLUDED.

NUMBER.	WEIGHT.	DIAMETER.	PRICE—Plain.	PRICE—Bronzed.
0	53 lbs.	13 in.	\$6 00	\$8 00
1	67	16	8 00	11 00
2	95	18	12 00	16 00
3	137	20	15 00	20 00
4	201	23	25 00	33 00
5	297	28	40 00	53 00
6	621	32	75 00	100 00



# STEEL COMPOSITION BELLS.



FOR FARMS, SCHOOLS, HOTELS, FACTORIES, AND CHURCHES.

## STEEL COMPOSITION CHURCH BELLS.

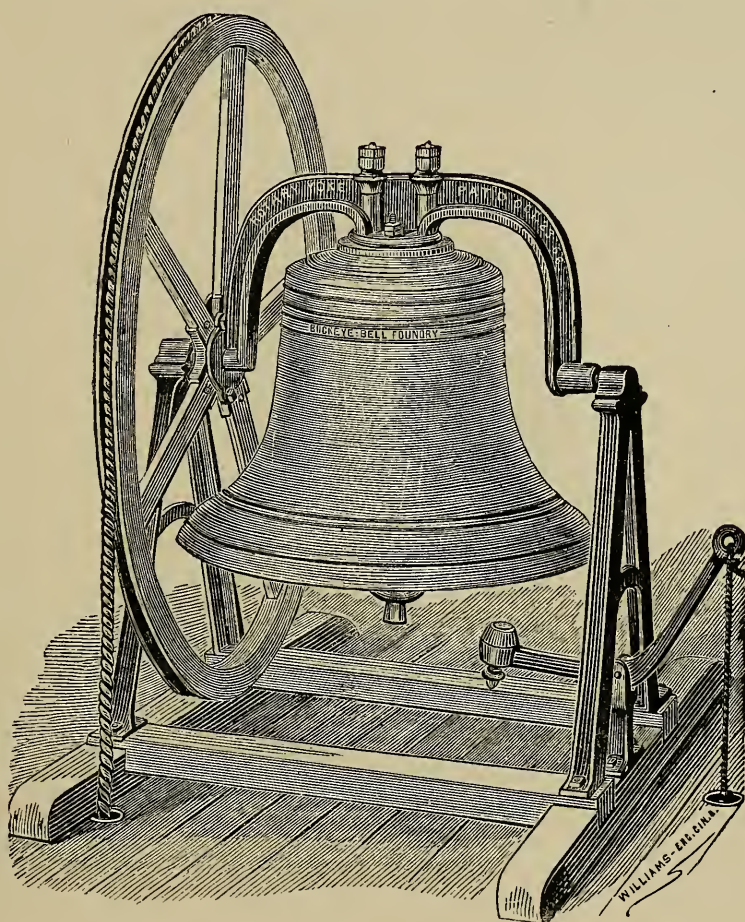
Mounted in style similar to Cut.

NUMBER.	DIAMETER. Inches.	WEIGHT. With Hangings. Pounds.	PRICE. Plain.	PRICE. Bronzed.
5	28	297	\$40 00	\$53 00
6	32	621	75 00	100 00
7	36	800	125 00	
8	40	1,000	165 00	
9	44	1,300	225 00	

Church Bells warranted for one year, against breakage from ordinary ringing. Recast, free of charge, on return of the broken Bell.

*These Bells are preferred by many to Bell-metal Bells at double price.*

## GENUINE BELL-METAL BELLS.



To meet the wants of those preferring a more expensive article, we have made arrangements to furnish Genuine Bell-Metal Bells, and all sold by us as such are made of Pure Copper and Block Tin, modeled and constructed on strictly scientific and harmonical principles, of such a shape, and with the metals in such proportion as long experience has demonstrated to be the best, and by which we are enabled to furnish Bells unsurpassed in durability, purity and perfection of tone.

They are cast in loam, in PERFORATED IRON CASES, a great improvement over the old method, producing a more solid casting, of more uniform thickness, and consequently of greater perfection of vibration and tone.

They are mounted with IMPROVED HANGINGS — protected by letters-patent — which are so constructed as to allow them to be set up with the greatest facility, to be rung with the least amount of labor, to give the most effective performance to the Bell, and to obviate very materially the risk of breaking.

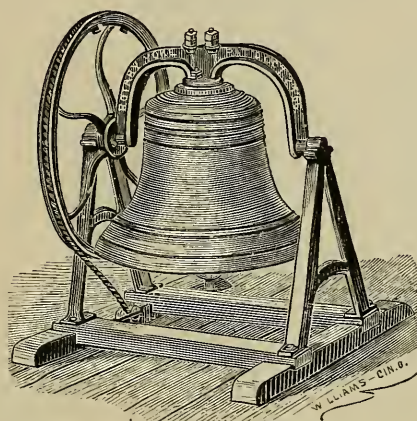
## DESCRIPTION OF CHURCH BELLS.

The weights given in the following tables are those designating the pattern; the actual weights often vary above and below these.

Owing to the fluctuations in the price of copper and tin, no uniform rate can be printed in a circular at which bells will continue to be sold; but all inquiries from parties desiring to purchase will be promptly responded to, and the lowest rates given.

DESCRIPTION OF BELLS.			HANGINGS.		
APPROXIMATE WEIGHT.	DIAMETER.	TOPE.	SIZE OF FRAME.	SIZE OF WHEEL.	PRICE OF HANGINGS.
Pounds.	Inches.	Range.	Inches.	Inches.	
200	22	E to F	29 x 29	24	\$14 00
225	23	E <sub>2</sub> to E	32 x 32	26	15 00
250	24	D to E	32 x 32	26	16 00
275	25	D to E	32 x 32	26	17 00
300	26	D to E <sub>2</sub>	34 x 34	29	18 00
325	26	D to E <sub>2</sub>	34 x 34	29	19 00
350	27	C# to D	34 x 34	29	20 00
400	28	C to D	38 x 38	44	23 00
450	29	C to D	38 x 38	44	25 00
500	30	B to C#	40 x 40	48	28 00
550	31	E <sub>2</sub> to C	40 x 40	48	30 00
600	32	A to B	43 x 43	52	32 00
650	33	A to B	43 x 43	52	32 00
700	34	A <sub>2</sub> to E <sub>2</sub>	46 x 46	54	35 00
800	36	G# to A#	46 x 46	57	35 00
900	37	G to A	50 x 50	60	40 00
1000	38	G to A	50 x 50	60	40 00
1200	40	F# to G#	53 x 53	64	45 00
1350	42	F# to G	56 x 56	68	50 00
1500	44	F to G	56 x 56	68	50 00
1600	45	F to G	60 x 60	72	55 00
1800	46	E to F	61 x 61	72	65 00
2000	48	E to F	62 x 62	82	70 00
2300	50	D to E	65 x 65	82	70 00
2600	52	C# to D	65 x 65	90	80 00
3000	56	C# to D	70 x 70	90	90 00
3500	58	C to C#	75 x 75	94	95 00
4000	61	C to C#	75 x 75	94	100 00
4500	63	B to C	80 x 80	100	110 00
5000	66	A# to B	80 x 80	100	120 00

SCHOOL-HOUSE, FARM, HOTEL,  
ACADEMY, FACTORY, STEAMBOAT & PLANTATION BELLS.  
OF GENUINE BELL-METAL.



Ranging from 100 pounds to 350 pounds, mounted with IMPROVED PATENT-ED ROTARY HANGINGS, by means of which the Bell can be readily turned in the yoke, so as to present a new point for the stroke of the clapper, when desired. Frame of ash timber, iron stands, clapper springs, and iron wheel.

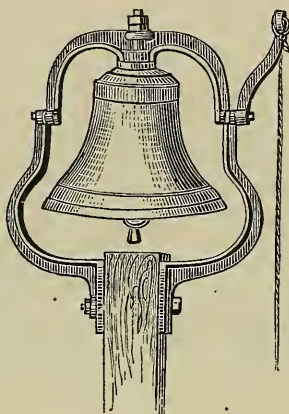
BELLS.			HANGINGS.	
WEIGHT. Pounds.	DIAMETER. Inches.	STONE. Range.	SIZE OF FRAME. Inches.	PRICE.
100	18	G to A	24 x 24	\$ 9 00
120	19	G to A	27 x 27	10 00
135	20	F# to G#	27 x 27	11 00
150	20	F to G	27 x 27	12 00
175	21	F to G	29 x 29	13 00
200	22	E to F	29 x 29	14 00
225	23	E $\frac{1}{2}$ to E	32 x 32	15 00
250	24	D to E	32 x 32	16 00
275	25	D to E	32 x 32	17 00
300	26	D to E $\frac{1}{2}$	34 x 34	18 00
325	26	D to E $\frac{1}{2}$	34 x 34	19 00
350	27	C# to D	34 x 34	20 00



## SCHOOL-HOUSE, FARM, AND HOTEL BELLS.

OF GENUINE BELL-METAL.

Ranging from 15 to 90 pounds, mounted with Patent Rotary Yoke, Frame, Lever and Bolt, making a complete set of Hangings.



Weight of Bells,	15	20	25	30	35	40 pounds.
Price of Hangings, \$	1 50	1 50	1 85	1 85	2 25	2 50
Weight of Bells,	50	60	70	80	90 pounds.	
Price of Hangings, \$	2 65	2 75	3 00	3 50	4 00	

## LOCOMOTIVE BELLS.

Of any size, and with shank of any desired shape, cast to order.

## FIRE-ALARM BELLS.

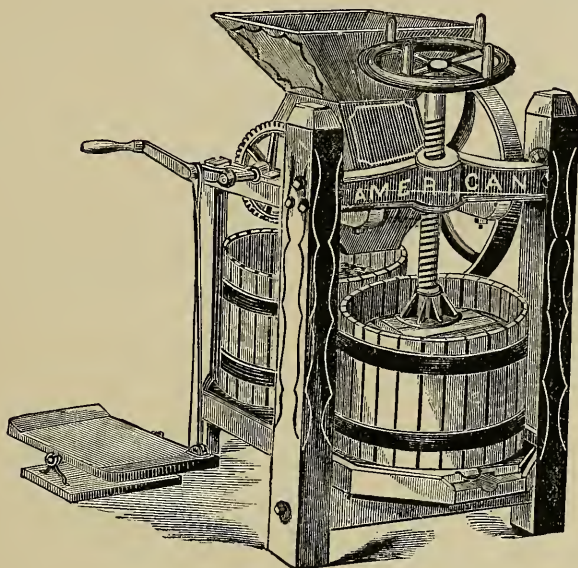
Of any desired size, cast to order.

## SACRISTY BELLS, ALTAR BELLS, SIGNAL BELLS, HOSE-CARRIAGE BELLS.

## BELLS WITH SPRINGS.

Small Bells, cast with shank for attaching springs, furnished with or without springs, rough or polished.

HAVEN'S LATEST IMPROVED  
AMERICAN CIDER MILLS.



IMPROVED ENCASED GEARING.

THESE IMPLEMENTS we believe to be very superior for their purpose, whilst our prices are intended to be no higher than are demanded for similar articles claimed to stand "first-class."

We do not exhibit Cider Mills at fairs, painted and polished finer than any piece of furniture in a farmer's house, but ONLY AS CIDER MILLS; and whenever we can get a candid examination or test, have no fear of always taking the first premium. We give the result of a trial made at the Ohio State Fair at Springfield in September, 1870, which is the fairest we have ever been able to obtain. There were fifteen pounds of apples from the same pile weighed out to each of four mills, three of which we will not designate by name, but only say they are considered the most popular mills in the West.

75	revolutions of the crank of No. 1	ground the apples;	-	produced	6½ lbs.
61	" " " " 2 "	" "	-	"	7½ lbs.
60	" " " " 3 "	" "	-	"	7 lbs.
30	" " " the American	ground the apples;	"	"	9½ lbs.

Extracting from the same fruit 46 per cent. more cider than No. 1, 29 per cent. more than No. 2, and 35 per cent. more than No. 3—an average of 37 per cent. more cider, and with less than half the labor of grinding.

If we can beat the STANDARD mills so badly, what CAN'T we do in comparison with machines of less pretensions? We warrant every mill we sell to look as well and do as much work as the one which took the above first premium.

Do not be deceived by the misrepresentations of any interested "agents," but compare the construction of other Cider Mills with ours, and you will be convinced which is the best; or, take a handful of pomace from ours, and it will be as soft and full of juice as a wet sponge—while some others discharge it in hard lumps, "grated" fine or coarse as it may happen, but only *grated*, not *CRUSHED*.

In fact, we have taken pressed pomace from a competing mill on the fair grounds, passed it through our rolls and press, and procured a large yield of cider, and can do the same thing any time with almost any mill of the usual construction—with the rolls running at different speeds.

The cut represents only the general appearance of our Mills, which are gotten up on a principle entirely different from other portable mills. Every farmer knows that no portable cider mill has hitherto been made to equal the old-fashioned power machine, formed of two upright grooved rolls, working into each other. Inventors have started out with the idea that it was better to grate the fruit, and most portable mills have been built on this mistaken notion. A moment's reflection and a very short trial will prove that our method is the best. The top roller, furnished with sharp projecting ribs, breaks and cuts the apples just sufficiently to allow the pieces to be drawn in between the two bottom or under rollers. These are cast with alternate grooves and ribs, run at the same speed, and interlocking with each other, by which means the fruit is mashed thoroughly, breaking all the cells and rendering the subsequent labor of pressing much lighter. In fact, if the pomace is allowed to drain a while, a **VERY LARGE PROPORTION** of the cider will run off without any pressing, which should be saved separately, as it is the most delicious part of the product.

The **LOWER ROLLERS** are adjustable, so that they can be set to mash grapes without crushing a seed. The **HOPPER** can be removed at pleasure, for the purpose of cleaning, by merely turning a button; and they are, in every respect, a *first-class CIDER AND WINE MILL*. We are so well satisfied, from actual experiment, that it will make one fourth more cider from a given quantity of apples, with an expenditure of only three-fourths of the labor, that **WE WARRANT** that in pressing three hundred bushels of apples, the saving in cider between it and usual "grating" mills will pay for the mill. As it will grind from 40 to 60 bushels of apples per hour, a very small additional yield of cider is sufficient to do this, and any one can gain the price of the mill in six days' work.

Our hopper was of a plain though substantial shape; we have much improved the appearance of it, and at the same time provided recesses for the gearing, protecting it from the liability of *being clogged* by apples getting into the teeth. The outline is shown more clearly on the cut of the "Young America" (patent pending).

In all cider mills the girth has been the weakest place, frequently giving down by the compression of the wood when the press was worked up to the power necessary to extract the cider completely. We have added a cast iron piece (patented,) which gives a broader bearing on which the girth rests, effectually remedying this defect.

Another well known disadvantage of all screw presses is, that the screw has to be turned down every few minutes as the cheese sinks. On February 7, 1871, letters patent were issued to James L. Haven for an "Improvement in Wine and Cider Presses," consisting, essentially, of placing a spring between the screw

and the follower, whereby the pressure is made continuous for a few minutes after turning down the screw, keeping a steady stream of juice flowing whilst the operator is gathering or grinding apples, adding materially to the yield of cider in a given time.

We illustrate, attached to the crank of the mill, another device by which the WEIGHT of the operator is made available to furnish POWER. The natural swaying motion of working a crank throws the weight alternately on the right and left leg, working the treadle on which the operator stands, and the power is conveyed to the crank in a way that will be readily understood by the cut; but the advantage can only be appreciated on trial. The same motor can be attached to any other machine, such as a corn sheller or feed cutter, on procuring a suitable crank.

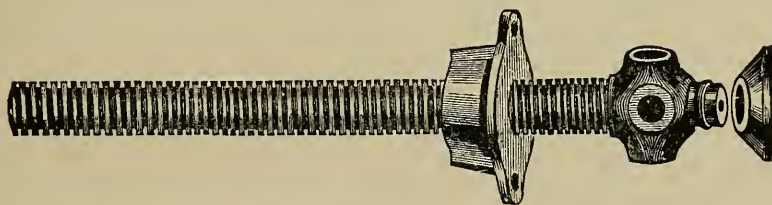
Price of American Mill,	-	-	-	-	-	-	-	-	each, \$45 00
" Whitney's Patent Motor,	-	-	-	-	-	-	-	-	" 3 00
" Patent Continuous Press,	-	-	-	-	-	-	-	-	" 3 00

## POWER MILLS.

We also manufacture to order, HAVEN'S AMERICAN WINE AND CIDER MILL to run by power, for *cider, wine, and vinegar manufacturers*.

No. 1 will grind 100 bushels per hour; price, at our Factory,	-	-	\$75 00
" 2 " 200 " " " "	-	-	150 00

## CAST IRON CIDER MILL SCREWS.



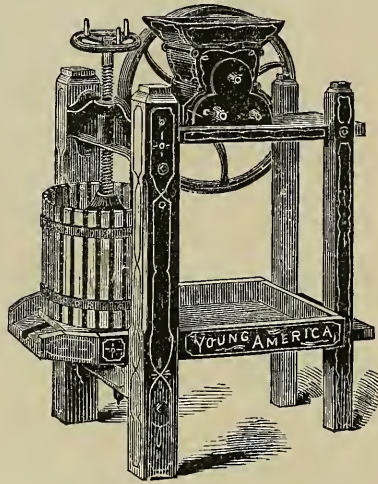
4½ feet long, 4½ inches diameter,	-	-	-	-	-	-	each, \$17 00 net
5 " 4½ " " " " "	-	-	-	-	-	-	" 18 00 "

With one of our Power Mills and a few Presses, fitted with our large screws, the surplus apples of a neighborhood can be worked into cider or vinegar very profitably.

For capacity and any other information, we refer to Geo. C. Ware, Vinegar and Cider Manufacturer, Nos. 287 & 289 West Third Street.



## HAVEN'S PATENT "YOUNG AMERICA" WINE & CIDER MILL.



### LATEST IMPROVED ENCASED GEARING.—Design Patented.

Having had frequent calls for a smaller mill constructed with four legs, we now offer to the trade our YOUNG AMERICA WINE AND CIDER MILL, of the same shape and with the same principle of grinding and mashing apparatus as in the large one. For GRINDING and MASHING, we claim that it is superior to any mill of its size before the public, and inferior to none in beauty and finish.

It can easily be operated by any member of the family, and a small quantity of cider can be made in a few minutes, or a barrel in a few hours, obtaining one-quarter more juice from the fruit than with a mill made on any other principle.

As the cells of the apples must be broken to yield the cider freely, it is evident that the only rational way is to mash them between rollers before pressing. This our mill will do thoroughly. One roller is also adjustable for the purpose of grinding grapes without breaking the seeds.

It is, in every respect, a first-class mill, and warranted to give satisfaction where a small one is wanted, as it is, in all essential points, the same as our "AMERICAN," so well and favorable known. The press is at all times useful and available, for lard or any other purpose.

The GEARING is entirely encased, rendering breakage almost impossible.

The BALANCE WHEEL is sufficiently large to make the mill work easy, and is SCREWED ON, so that it can be readily detached in shipping.

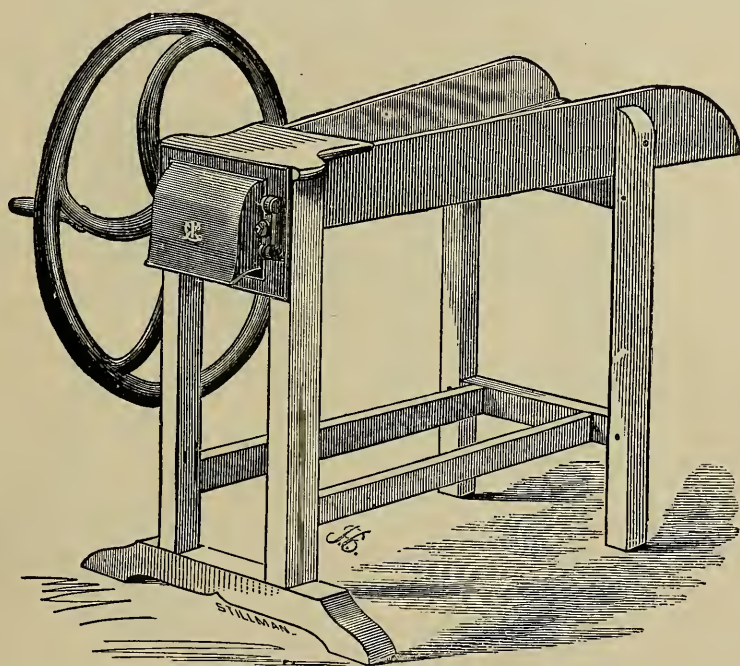
The FEED AND PRESSURE ROLLS are so arranged, that if a stone or other obstruction accidentally gets in, you can open a small cover, insert your hand, and remove it without the delay of taking the hopper off.

Price, with one crate, as shown, - - - - -	\$25 00
Extra crate and false bottom, if two are wanted, - - - - -	1 50

"JAMES L. HAVEN & COMPANY'S" I. X. L.

SANFORD'S PATENT  
PERFECT CUTTING BOXES.

FOR HAY AND STRAW.



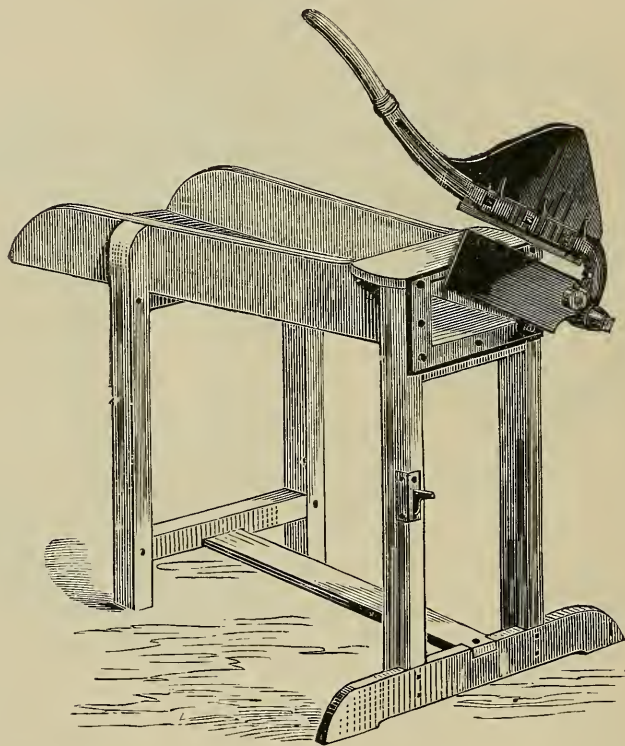
No. 1,	with 40 knives;	weight 150 pounds;	price,	-	-	-	each,	\$13 50
" 2,	" 40	" " 100	" " -	-	-	" 10 00		
" 3,	" 30	" " 60	" " -	-	-	" 8 00		

This is indisputably the most popular, and, for the purpose of cutting hay and straw, the BEST Cutting Box made.

They are manufactured and sold in very large numbers, and have increased in popularity annually for more than twenty years.

We sometimes have one brought to us for repairs, for the first time, which we know to have been in use for fifteen years.

JAMES L. HAVEN & CO.'S  
I. X. L.  
LEVER CUTTING BOXES.  
FOR STALKS, STRAW, OR HAY.



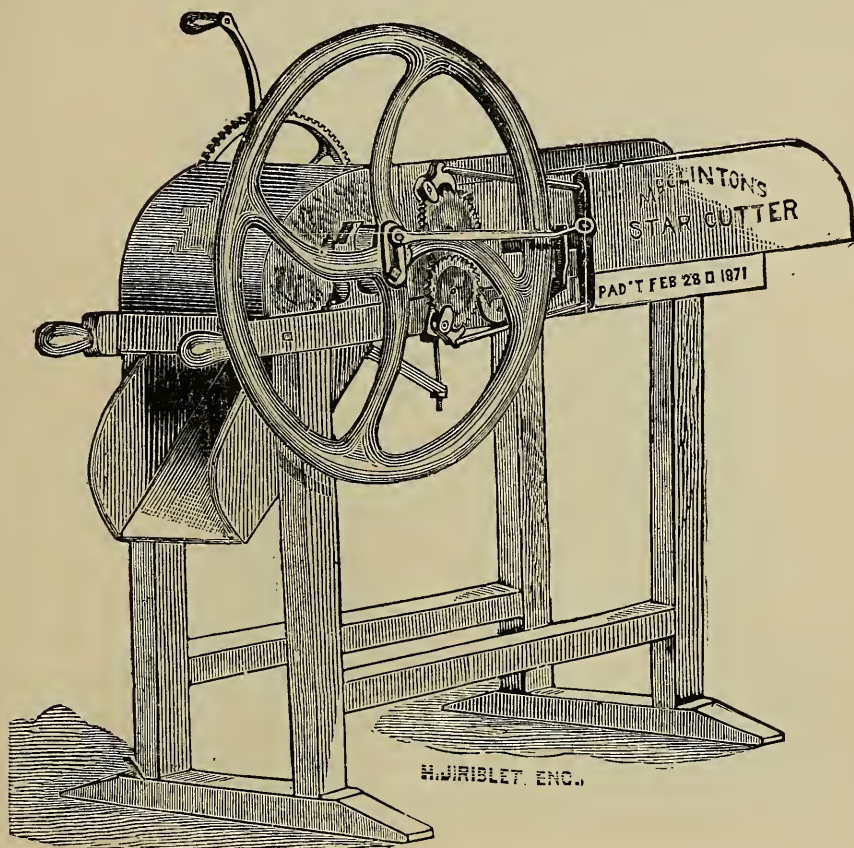
Weight 55 pounds; price, - - - - - each, \$7 00

To supply a want long felt for a CHEAP and reliable Lever Cutting Box, we have improved our "National" pattern as above, and offer you an article at a very low price, which we warrant to cut Stalks well and rapidly. It will also cut Hay and Straw as well as other lever cutters; but, of course, not as satisfactorily as our "Sanford" Cutters.



# STAR FODDER CUTTER.

Patented Feb. 28, 1871.



We have desired for years to obtain control of a really first-class Revolving Knife Cutting Box, adapted to coarse fodder as well as straw, and think we have succeeded.

There is but one heavy cast steel knife, geared to make four cuts to one turn of crank, which is better than more knives at a lower speed.

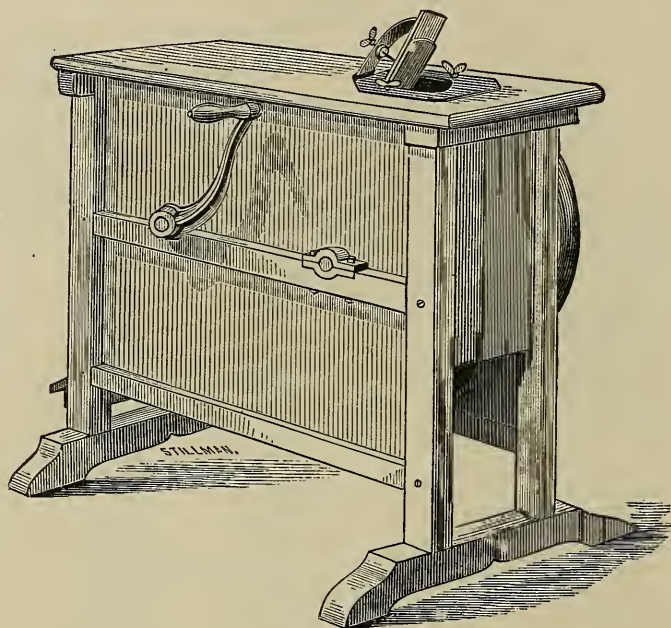
The castings are heavy, especially the fly wheel, and the frame is made of seasoned hard wood, bolted together, and we warrant them in every respect to be first-class machines.

No. 1,	7 inch knife, will cut	$\frac{1}{2}$ bushel per minute, price,	-	-	-	\$20 00
" 2,	9	"	"	1	"	25 00
" 3,	11	"	"	$1\frac{1}{2}$	"	30 00
" 4,	13	"	"	3	"	40 00
" 5,	15	"	"	4	"	50 00

Nos. 4 and 5 should be run by horse power.



## SOUTHERN CORN SHELLERS.



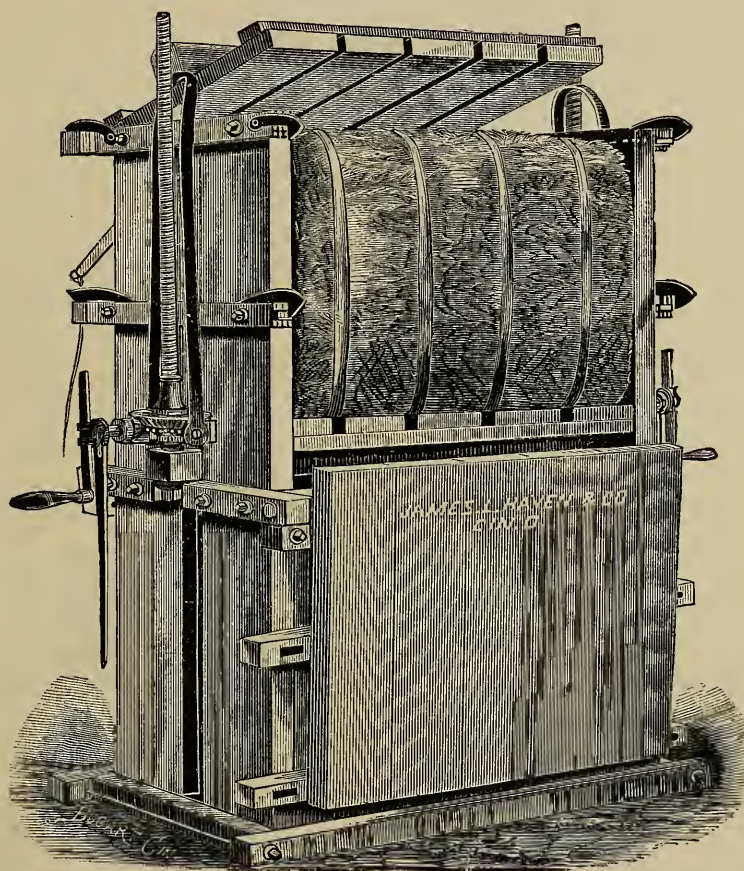
No. 1, Star pattern, 2 fly wheels, weight 100 pounds, price, - - each, \$12 00
" 2, inside fly wheel, weight 125 pounds, - - - - " 14 00
" 3, double, 2 fly wheels and feed tubes, weight 200 pounds, - " 18 00

No. 1 is usually called the "Star" pattern, the cogs being cast on the shell wheel. We have, however, gotten up new and improved patterns, making a more perfect machine than any of that style we have ever seen. The iron work is *larger* and *stronger* than others use, though the whole machine looks smaller, being made as compact as possible; and the fly wheels, though outside, are protected by the cover, so they are never broken in shipping.

No. 2 has separate gear, not cast on the shell wheel, but partitioned off from it, so that corn can never cause trouble by getting in the teeth. Fly wheel inside of the frame—two cranks.

No. 3 is a large, double machine, with two feed tubes, two fly wheels, and two cranks.

# PORTABLE HAY PRESS.



In baling hay or cotton in localities remote from markets, the advantages of producing a snug, compact bale are apparent. One serious objection to hand-presses, hitherto, has been that they did not successfully accomplish this; the bales, in fact, usually produced measuring full size—that is, 30 x 30 x 50 inches, but weighing no more than 200 instead of 250 pounds.

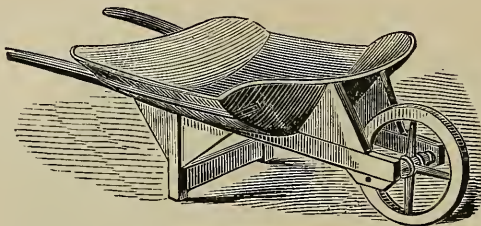
Mathematical calculations of the relative power exerted by the various hand-presses in use have been made, showing an advantage in favor of ours of nearly 200 per cent. in one, and of 50 in another case.

Two men only are required to operate the machine with success. Capacity, 12 to 14 bales per day.

The press, when set up, is 8 feet high, and occupies 4 x 6 feet, producing bales weighing up to 250 pounds.

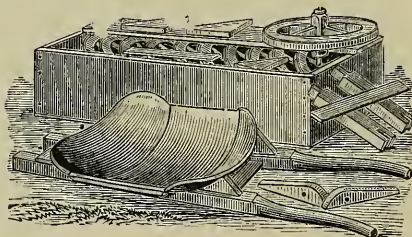
Weight 1000 pounds; price, - - - - - \$125 00

## RAILROAD BARROWS.



Nos. 1, 2, 3. Wood Wheels.

No. 1, usual size, weight 40 pounds,	- - - - -	each, \$2 25
" 2, large size, for coal, weight 55 pounds,	- - - - -	" 3 50
" 3, extra large, for corn, weight 70 pounds,	- - - - -	" 5 00



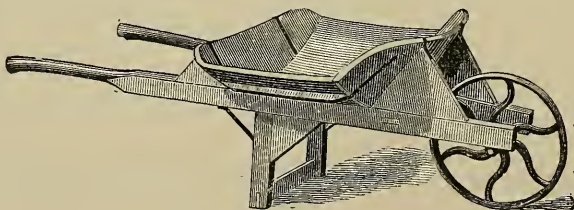
KNOCKED-DOWN RAILROAD BARROWS.

In this style they can be shipped by rail at one-half the rate of freight of barrows set up.

Size No. 1, only in dozen lots.

Additional for box and packing, per dozen, 50 cents. Weight about 500 lbs.

## IRON WHEEL RAILROAD BARROWS.

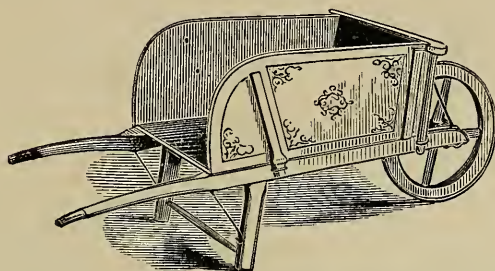


No. 4. With Iron Wheels.

Regular size, weight 40 pounds,	- - - - -	each, \$2 50
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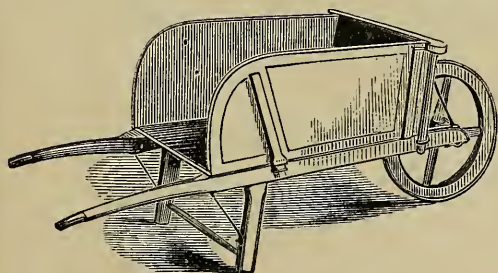
## GARDEN BARROWS.



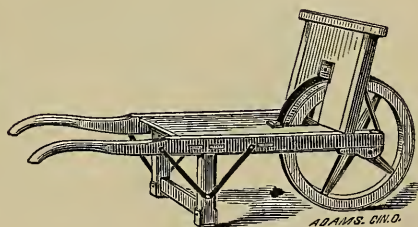
Four sizes. Painted, Striped, and Varnished.

No. 0, for boys, weight 30 pounds,	-	-	-	-	-	-	each, \$4 00
" 1, light,	"	35	"	-	-	-	" 5 00
" 2, medium,	"	40	"	-	-	-	" 5 50
" 3, heavy,	"	50	"	-	-	-	" 6 00

## BRICK BARROWS.



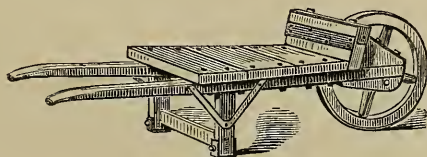
No. 1



No. 2

- No. 1, very strong, painted plain, same style as Garden Barrow, except much heavier, with side boards, weight 70 pounds, - - each, \$7 00
- No. 2, very strong, heavily ironed, without side boards, plainly painted, weight 60 pounds, - - - - - each, 8 00

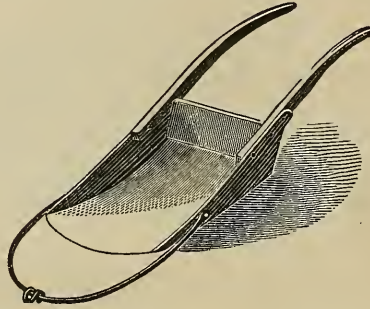
## STONE BARROWS.



Very strong, heavily ironed, and are best adapted for wheeling stone of any barrow in use, weight 90 pounds, - - - - - each, \$8 00



## IRON ROAD SCRAPERS.



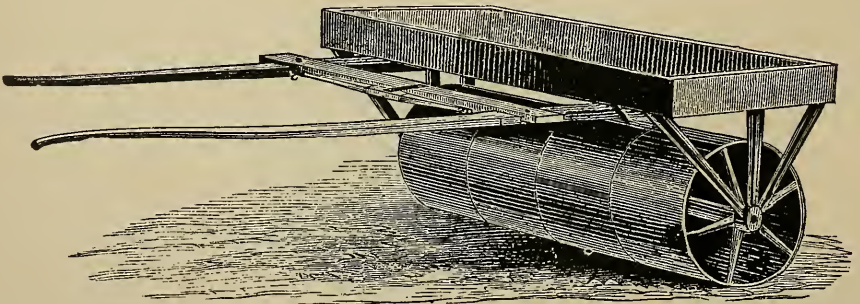
No. 2,	26 inches wide,	weight	90 pounds;	price,	-	-	-	-	\$10 00
" 3,	29	"	" 100	"	"	-	-	-	11 00



Hog's Nose after it has been Cut.

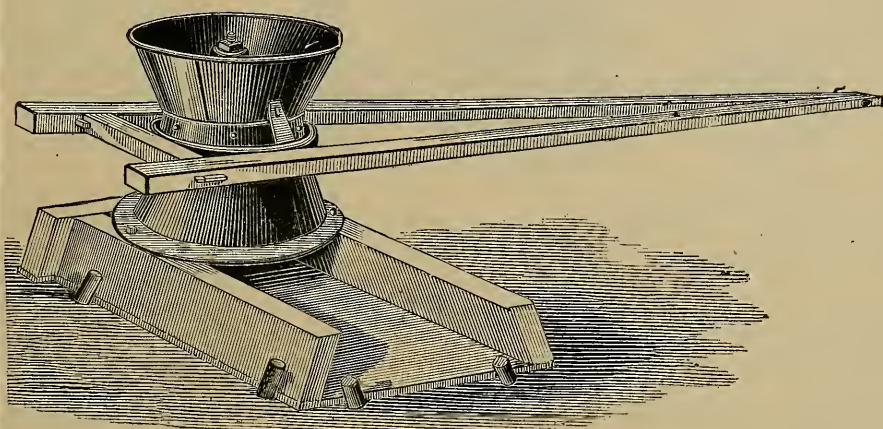
Per dozen, with 3 bits,	-	-	-	-	-	-	-	-	\$36 00
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## ROAD AND FIELD ROLLERS.



No. 1,	4 rolls, each 12 inch. face,	9 inch. diameter,	making 4 ft. long,	-	\$60 00
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## LITTLE GIANT CORN CRUSHERS.



### OUR LITTLE GIANT CORN CRUSHERS

Are Well Known and Standard Articles.

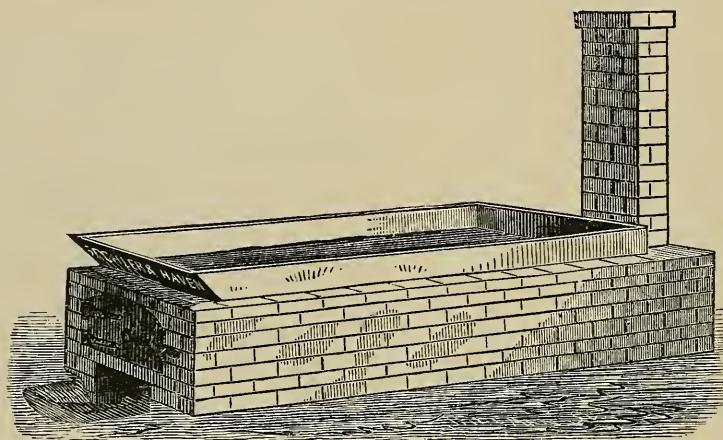
One of them will save more corn than many times its value of land will raise. Two bushels of ground corn will go as far as three unground, so that a few hours' time spent in grinding in winter will save the days spent in summer in raising an acre of corn.

We manufacture both the single and double—two and three coned—the one having two grinding surfaces, the other THREE, the latter of course being preferable.

### PRICES, COMPLETE, WITH BOX, HOPPER, AND SWEEP.

No. 1, 2 Cone, 1 horse, 5 to 8 bushels per hour,	-	-	-	-	-	\$35 00
" 2, 2 " light 2 horse, 7 to 10 bushels per hour,	-	-	-	-	-	50 00
" 2, 3 " 2 horse, 8 to 12 bushels per hour,	-	-	-	-	-	55 00
" 3, 3 " 3 horse, 12 to 20 bushels per hour,	-	-	-	-	-	70 00

# "COMMON SENSE" EVAPORATORS.



We have no patented Evaporator to offer you, but will sell you a plain, common sense article, as shown in the cut, which will, for less money, do as well as any of them. For rapid work three pans are needed. Fill the first with juice from the mill, and let it remain quiet till it comes to a boil, when all the impurities will rise in a mass, and can easily be removed; when about half done, draw or dip it into a barrel or a box, and instantly refill the pan. From this vat run or dip it into your finishing pans, of which you need two, lifting off one as soon as completed and replacing with the other; you will find this method of working it in batches much preferable to a continuous stream. If your mill, furnaces, &c., are set on rolling ground, the juice can be made to flow from one to the other very cheaply, saving a great deal of labor in dipping. If preferred, you can finish at one operation in the first pan. An outfit of this description can be gotten up very cheaply to suit any sized crop.

We furnish the following sizes of Evaporating pans:

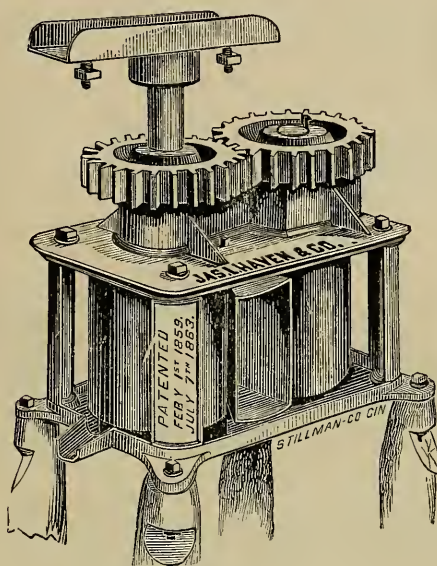
No. 1,	72 inches long,	30 inches wide,	6 inches deep;	price,	-	-	-	\$8 00
" 2,	96	" 30	" 6	" "	-	-	-	11 00
" 3,	120	" 30	" 6	" "	-	-	-	13 00
" 4,	72	" 36	" 6	" "	-	-	-	11 00
" 5,	96	" 36	" 6	" "	-	-	-	13 00
" 6,	120	" 36	" 6	" "	-	-	-	16 00

We furnish sheets ready punched without the wood sides, if desired, as follows:

Nos. 1	2	3	4	5	6
\$5 00	7 00	8 00	7 50	9 00	10 00



# "ECONOMIST" SORGHUM MILL.



## THEY WILL NOT CLOG.

There has existed, ever since the commencement of the culture of Sorghum, the want of a cheap Cane Mill—one that would be in the reach of every farmer, that would enable him to raise and manufacture a small crop, without the trouble, delay and expense of hauling his cane a long distance to a large mill, and then have to wait *mill fashion* for his turn, often taking some three or four days, and at a season of the year when his time was particularly valuable.

We are now able to fill that want in offering the Economist No. 0, a new two-roll mill, which is offered at a very low price. The capacity of this mill is only one-sixth less than of our No. 1 mills, and that difference is more than saved to the farmer by having his mill right where he wishes to do his work, and to be ready at such times as he can spare from other labor.

Of this, though a comparatively new Mill, a large number have been sold, giving satisfaction in every instance. It is very strongly made, and the risk of breakage very small; is easily set up and operated, and will, we think, perfectly supply the want that has so long existed—a Sorghum Mill so cheap as to be within the reach of all.

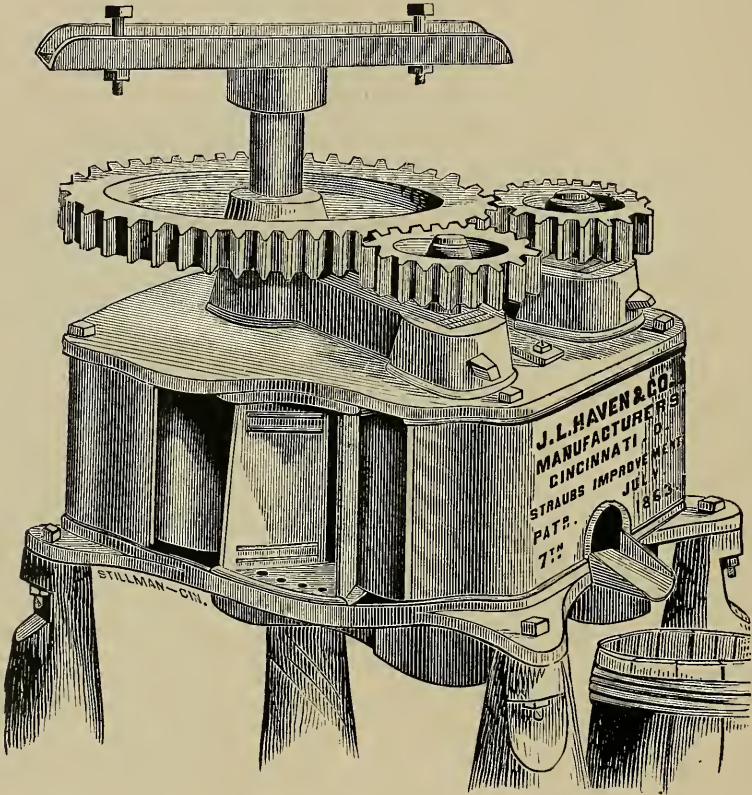
It competes in price with the rough, unturned, unfinished articles, all cast iron, no wrought shafts, no brass boxes, which are offered as cheap mills—in the end the dearest that can be purchased, as they have no durability, and less capacity than this for expressing syrup.

## DESCRIPTION.

2 rolls, 8 inches diameter, and 9 inches high; is capable of working off a crop of 3 to 4 acres. Weight, 300 pounds; price, - - - - - \$39 00



"PIONEER" SORGHUM MILL.



Top-Geared—Three Rolls—Oil-Tight Bottom Boxes.

WITH STRAUB'S PATENT BRIDGE.

THEY WILL NOT CLOG.

No. 00,	2 to	3	acre crop ;	weight, about	300	pounds ;	price,	-	\$44	00
" 1,	4 to	5	"	"	500	"	"	-	65	00
" 2,	5 to	8	"	"	650	"	"	-	80	00
" 3,	8 to	18	"	"	800	"	"	-	105	00

## "PIONEER" SORGHUM MILLS.

The opposite cut represents a class of Mills of which a greater number have been made and sold than of any other pattern, and although they have been put to the severest tests, yet from their great simplicity, strength, durability, and speed, under a limited amount of power, have received the most unequivocal stamp of public approval.

OF THIS STYLE WE MAKE FOUR SIZES.

---

### No. 00, PIONEER,

Has main roll 10, and feed and discharge rolls 6 inches diameter and 6 inches long, and is capable of taking off a crop of from 2 to 3 acres.

### No. 1, PIONEER,


Has a driving roll 12, and feed and discharge rolls 8 inches in diameter and 7 inches long, and is capable of taking off a crop of from 4 to 5 acres.

### No. 2, PIONEER,

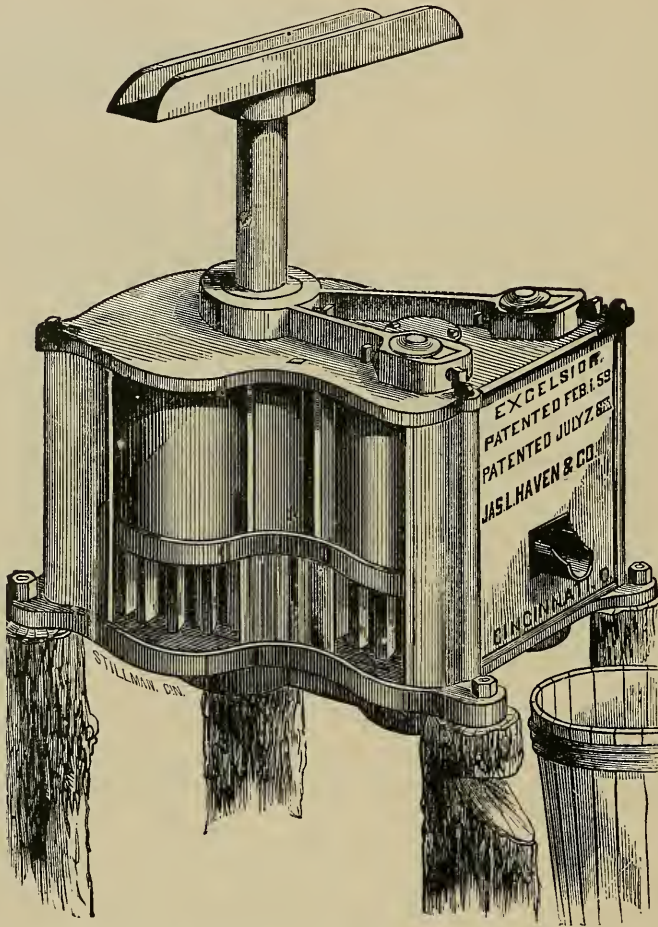
Has main roll 16, and feed and discharge rolls 8 inches in diameter, 8 inches long, and otherwise of extra strength and finish, and is capable of taking off a crop of from 5 to 8 acres.

### No. 3, PIONEER,

Has rolls of same diameter as No. 2, 12 inches long, but of extra strength, and is capable of taking off a crop of from 8 to 18 acres.

 We understate the capacity. More can be done if rushed, but it is true economy to get a mill LARGE ENOUGH, as it is not likely you will grow *less* sorghum another year.

# "EXCELSIOR" SORGHUM MILL.



**Bottom-Geared—Three Rollers—Three Plates—Oil-Tight Bottom Boxes.**

## STRAUB'S PATENT BRIDGE.

**Journals run on Steel Steps. Will not Clog.**

No. 5,	8 to 10 acre crop;	weight about	800 pounds;	price,	-	-	\$100 00
" 6,	15 to 20	"	"	"	1250	"	125 00

## "EXCELSIOR" SORGHUM MILL.

This series of Mill has been before the public for seven seasons, and has given universal satisfaction; the only complaint ever made was that it *expressed the juice too fast*, which we think is a *very good fault*.

As will be observed by the cut, we use three plates, the gear working between the bottom and juice plates, and the journal bearings being below, thus admitting of the bottom of the openings being closed, preventing waste or loss of oil, and always insuring the lower journals being well lubricated, a point we desire to especially impress upon the mind of purchasers as being of peculiar importance, from the fact that the majority of failures result from this cause alone.

Again, the entire weight of the roll and gear wheel rests on a steel step under the end of the journals, thereby saving all the friction caused by the rolls resting on the hub, as is the case with all vertical mills made on any other plan.

OF THESE WE MAKE TWO SIZES.

---

### NO. 5, EXCELSIOR,

One-horse mill, has main rolls 16 inches in diameter, feed and discharge roll 8 inches diameter, and  $8\frac{1}{2}$  inches long; has extra heavy shafting, brass boxes, and is finished in every respect in the very best manner; is in perfect working order before it leaves the hands of the workmen, and is capable of working off a crop of from 8 to 10 acres.

### NO. 6, EXCELSIOR,

Two-horse-mill, is made on precisely the same principle; has main roll 16 inches, feed and discharge roll 8 inches in diameter, with a height of 13 inches, with extra heavy shafting, brass boxes, &c., all of the best style of workmanship, and is capable of working off a crop of from 15 to 20 acres.



## CAST IRON SUGAR KETTLES.

12 gallons, weight	36 pounds,	-	-	-	-	-	-	-	each, \$2 00
15 "	" 46 "	-	-	-	-	-	-	-	" 2 75
20 "	" 64 "	-	-	-	-	-	-	-	" 3 75
25 "	" 93 "	-	-	-	-	-	-	-	" 5 60

## CASTINGS FOR FURNACES.

## Furnace Doors and Grate Bars.

No. 1, frame and door, 16 by 18 inches,	-	-	-	-	-	-	-	\$6 00
" 2, " " doors, 28 by 20 "	-	-	-	-	-	-	-	11 00
" 1, grates, 28 by 18 inches, heavy,	-	-	-	-	-	-	-	8 00
" 2, " 31 by 18 " "	-	-	-	-	-	-	-	9 40
" 3, " 48 by 20 " " extra,	-	-	-	-	-	-	-	17 50
" 4, " 33 by 18 " light,	-	-	-	-	-	-	-	3 00

## TERMS OF WARRANTY.

We warrant all Mills for one season, with fair usage, and furnish pieces for repairs, free of charge, when the fault is evidently in the casting. If the piece is not returned for examination, we charge the following prices. We can also furnish repairs for most all machinery formerly made by our predecessors in this line: Scott & Hedges, Hedges, Free & Co., Sechler & Porter, and Sechler & Haven.

*Keep the mill well oiled, and the bolts properly screwed up, and you will probably have no trouble with breakages.*

	ECONOMIST	PIONEER.				EXCELSIOR.	
	No. 0.	No. 00.	No. 1.	No. 2.	No. 3.	No. 5.	No. 6.
Lever Cap, - - -	\$4 00	\$4 00	\$4 00	\$4 00	\$5 00	\$5 00	\$6 00
Top Plate, - - -	8 00	8 00	12 00	14 00	15 00	15 00	15 00
Bottom Plate, - - -	10 00	10 00	14 00	16 00	17 00	17 00	17 00
Large Gear Wheels, -	3 00	5 00	5 00	8 00	8 00	9 00	10 00
Small Gear Wheels, each,	3 00	2 00	3 00	3 00	3 00	4 00	5 00
Large Roll, - - -	16 00	15 00	22 00	28 00	45 00	30 00	55 00
Small Roll, each, - -	14 00	10 00	12 00	12 00	20 00	14 00	25 00
Back Plate, each, - -	50	50	2 00	2 00	3 00	3 00	3 00
Front Plate, each, - -	50	50	2 00	2 00	3 00	3 00	3 00
Juice Plate, - - -	-	-	-	-	-	3 00	3 00
Feed Box, - - -	50	1 00	1 00	1 00	1 00	1 00	1 00
Dumb Return, - - -	-	50	50	50	50	50	50
Bridges, each, - - -	75	75	1 50	1 50	1 50	1 00	1 00
Brass Boxes, per set, -	2 00	2 00	4 00	4 00	5 00	5 00	5 00
Chilled Boxes, per set, -	2 00	3 00	3 00	3 00	3 00	3 00	3 00

# PLANTATION AND FARM WAGONS.

In ordering Wagons please notice that sizes Nos. 0, 1, 2, and 3 are *army* tongue style; and 4, 5, and 6, stiff tongue, unless otherwise ordered. They are all supplied with double and single trees, lock and stay chains, and are striped and varnished, unless ordered to be finished plain.

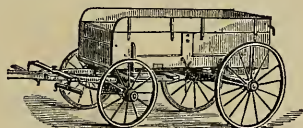
The following extras can be furnished with any Wagon if ordered:

When tire is ordered heavier than that mentioned in description, the difference in weight of iron will be an extra charge also.

## EXTRAS FOR FARM WAGONS.

Spring seats, each, - - - - -	\$8 00
Break on gearing, - - - - -	7 00
Break on gearing and body, - - - - -	10 00
Bows for top, including staples for same, - - - - -	2 50

## PLANTATION OR FARM WAGONS.



### No. 0. VERY LIGHT TWO-HORSE WAGON.

3 ft. 8 in. and 4 ft. 8 in. wheels, with  $1\frac{1}{2}$  in. iron axles, 7 by 9 in. hubs,  $1\frac{3}{8}$  in. spokes,  $1\frac{3}{8}$  by  $\frac{3}{8}$  in. tire; track, 5 ft. 2 in. from out to out, unless otherwise ordered.

Capacity, 1500 pounds; weight, 750 pounds.

Price, with iron axles, - - -	without body, \$73 00; with body, \$85 00
“ “ $2\frac{3}{4}$ in. thimble skeins, -	“ “ 68 00; “ “ 80 00

### No. 1. LIGHT TWO-HORSE WAGON.

3 ft. 8 in. and 4 ft. 8 in. wheels, with  $1\frac{5}{8}$  in. iron axles,  $7\frac{1}{2}$  by 10 in. hubs, 2 in. spokes,  $1\frac{1}{2}$  by 7-16 in. tire; track, 5 ft. 2 in. from out to out, unless otherwise ordered.

Capacity, 1800 pounds; weight, 850 pounds.

Price, with iron axles, - - -	without body, \$78 00; with body, \$90 00
“ “ 3 in. thimble skeins, -	“ “ 73 00; “ “ 85 00

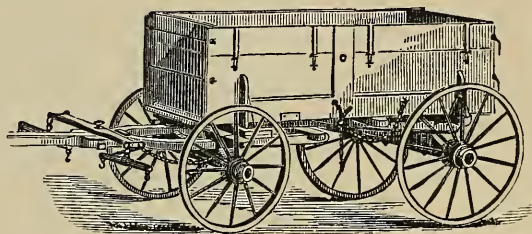
### No. 2. MEDIUM TWO-HORSE WAGON.

3 ft. 8 in. and 4 ft. 8 in. wheels, with  $1\frac{3}{4}$  in. iron axles, 8 by 11 in. hubs,  $2\frac{1}{4}$  in. spokes,  $1\frac{5}{8}$  by  $\frac{1}{2}$  in. tire; track, 5 ft. 2 in. from out to out, unless otherwise ordered.

Capacity, 2200 pounds; weight, 925 pounds.

Price, with iron axles, - - -	without body, \$82 00; with body, \$95 00
“ “ $3\frac{1}{4}$ in. thimble skeins, -	“ “ 77 00; “ “ 90 00

## PLANTATION OR FARM WAGONS.

**No. 3. HEAVY TWO-HORSE WAGON.**

3 ft. 8 in. and 4 ft. 8 in. wheels,  $1\frac{1}{2}$  in. iron axles,  $8\frac{1}{4}$  by 12 in. hubs,  $2\frac{3}{8}$  in. spokes,  $1\frac{3}{4}$  by  $\frac{1}{2}$  in. tire; track, 5 ft. 2 in.

Capacity, 3000 pounds; weight, 1000 pounds.

Price, with iron axles, - - - without body, \$86 00; with body, \$100 00  
 " "  $3\frac{1}{2}$  in. thimble skeins, - " " 81 00; " " 95 00

**No. 4. LIGHT FOUR-HORSE WAGON.**

3 ft. 8 in. and 4 ft. 8 in. wheels, 2 in. iron axles,  $8\frac{1}{2}$  by 13 in. hubs,  $2\frac{1}{2}$  in. spokes,  $1\frac{3}{4}$  by  $\frac{5}{8}$  in. tire; track, 5 ft. 2 in.; spreader bars for lead horses.

Capacity, 4000 pounds; weight, 1200 pounds.

Price, with iron axles, - - - without body, \$95 00; with body, \$110 00  
 " "  $3\frac{3}{4}$  in. thimble skeins, - " " 90 00; " " 105 00

**No. 5. MEDIUM FOUR-HORSE WAGON.**

3 ft. 8 in. and 4 ft. 8 in. wheels,  $2\frac{1}{4}$  in. iron axles, 9 by 14 in. hubs,  $2\frac{1}{2}$  in. spokes, 2 by  $\frac{5}{8}$  in. tire; track, 5 ft. 2 in.; spreader bars for lead horses.

Capacity, 5000 pounds; weight, 1400 pounds.

Price, with iron axles, - - - without body, \$105 00; with body, \$120 00  
 " " 4 in. thimble skeins, - " " 100 00; " " 115 00

**No. 6. HEAVY FOUR-HORSE WAGON.**

3 ft. 8 in. and 4 ft. 8 in. wheels,  $2\frac{1}{2}$  in. iron axles,  $9\frac{1}{2}$  by 14 in. hubs,  $2\frac{3}{4}$  in. spokes, 2 by  $\frac{5}{8}$  in. or  $2\frac{1}{4}$  by  $\frac{5}{8}$  in. tire; track, 5 ft. 2 in.; spreader bars for lead horses.

Capacity, 6000 pounds; weight, 1500 pounds.

Price, with iron axles, - - - without body, \$118 00; with body, \$135 00  
 " "  $4\frac{1}{2}$  in. thimble skeins, - " " 113 00; " " 130 00

## LOG WAGONS.

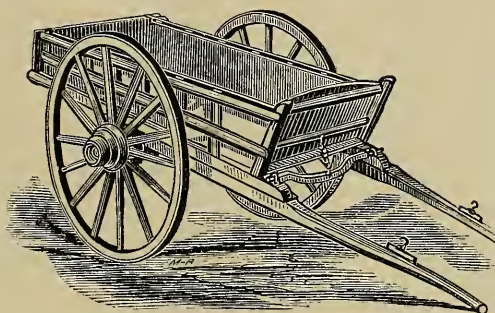
Four Wheels. For Oxen or Horses.

3 ft. and 3 ft. 4 in. wheels,  $2\frac{3}{4}$  in. iron axles, 10 by 16 in. hubs, 3 in. spokes, 3 by  $\frac{5}{8}$  in. tire; track, 5 ft. 2 in.

Capacity, 10,000 pounds.

Price, with iron axles,	- - - - -	\$150 00
" " steel thimble skeins,	- - - - -	150 00
" " usual wagon boxes, skeins, and linch pins,	- - - - -	135 00

## DUMP CARTS.



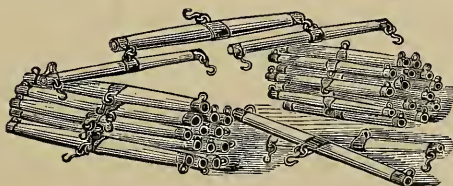
## PLANTATION.

$1\frac{3}{4}$  in. iron axles,  $1\frac{5}{8}$  by  $\frac{1}{2}$  in. tire; weight, 515 pounds; price, - - \$45 00

## RAILROAD.

2 in. iron axles,  $1\frac{3}{4}$  by  $\frac{5}{8}$  in. tire; weight, 600 pounds; price, - - \$50 00

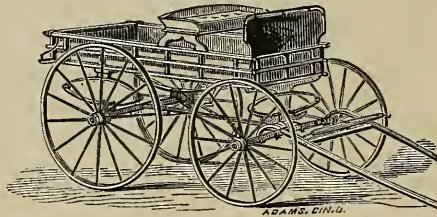
## PLOW SINGLE AND DOUBLE TREES.



Plow single trees, 26 in. long, ironed, painted, and ready for use,	per doz.,	\$5 75
Plow double trees, without lap rings, ready for use,	"	9 25
Open or lap rings, $\frac{5}{8}$ in.,	"	80
" " $\frac{1}{2}$ in.,	"	70



# SPRING WAGONS.



No. 1.

3 ft. 6 in. and 4 ft. 2 in. wheels, 1 in. axles and tire, two 1½ in. springs; 3-rail body, with one cushioned seat; shafts; track, 5 ft. 2 in.

Weight, 400 pounds; price, - - - - - \$80 00  
 Weight, boxed, 425 pounds; price of boxing, \$2 00 net.

No. 2.

3 ft. 6 in. and 4 ft. 2 in. wheels, 1½ in. axles and tire, three 1½ in. springs; 3-rail body, with one cushioned seat; shafts; track, 5 ft. 2 in.

Weight, 450 pounds; price, - - - - - \$85 00  
 Weight, boxed, 485 pounds; price of boxing, \$2 00 net.

No. 3.

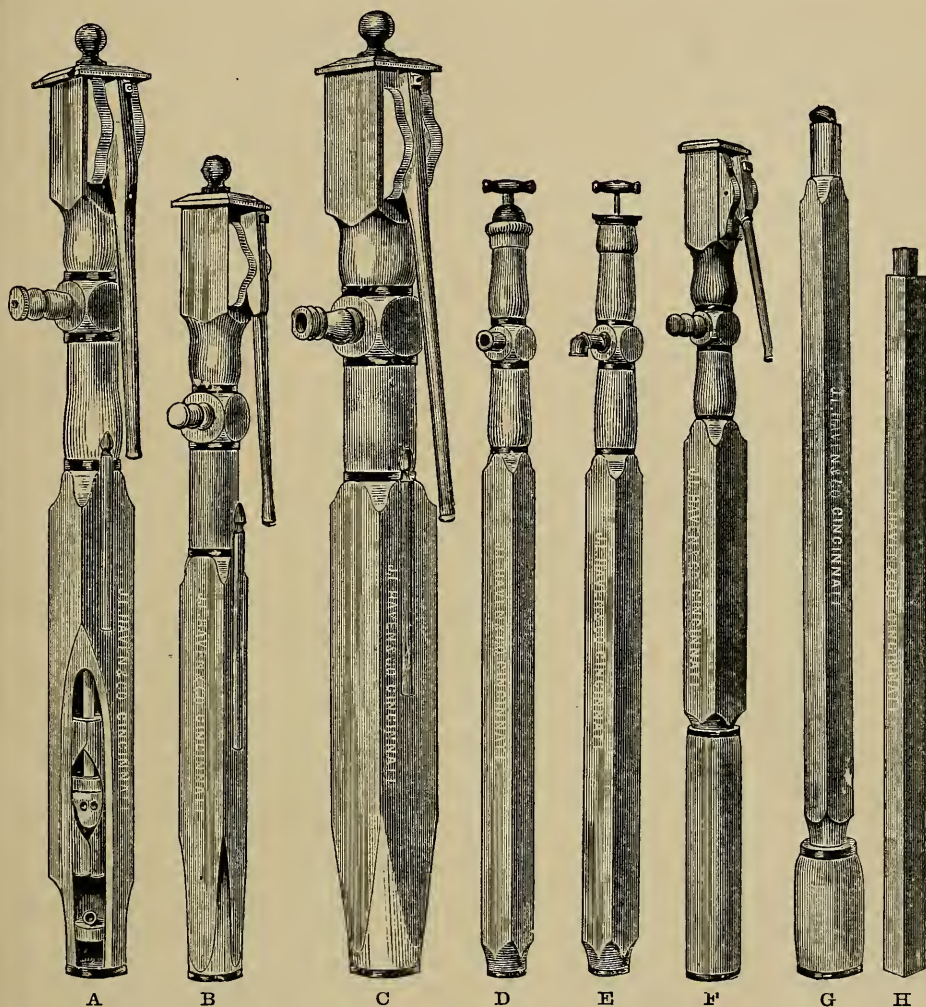
3 ft. 6 in. and 4 ft. 2 in. wheels, 1½ in. axles and tire, three 1½ in. springs; 3-rail body, with one cushioned seat; shafts.

Weight, 540 pounds; price, - - - - - \$90 00  
 Weight, boxed, 575 pounds; price of boxing, \$2 00 net.

## EXTRAS FOR ANY OF THE ABOVE SPRING WAGONS.

Seats complete, with cushion,	- - - - -	\$6 00
Pole,	- - - - -	10 00
Enameled cloth top,	- - - - -	30 00
Break,	- - - - -	8 00
For pole without shafts,	- - - - -	5 00

## PATENT IMPROVED WOODEN PUMPS.



## DESCRIPTION OF CUTS.

- A, Represents the No. 1 Pump, with galvanized iron lining.  
 B, " No. 2 Pump, " " " "  
 C, " Stock Pump, " " " "  
 D, " Wooden Cistern Pump, draw handle.  
 E, " Iron Cap " " " "  
 F, " Wooden " " lever "  
 G, " No. 1, 2 and Stock Pump Pipe, with Coupling.  
 H, " Cistern Pump Tubing, with socket joint.

# PATENT IMPROVED WOODEN PUMPS.

## PRICE LIST OF PUMPS AND FITTINGS.

### STOCK PUMP.

7 ft. long, 7 in. square, galvanized iron lined,  $4\frac{3}{8}$  in. bore, stroke  $10\frac{1}{2}$  in.,  
capacity 90 gallons per minute; each, - - - - - \$6 75

### No. 1 PUMP.

7 ft. long, 6 in. square, galvanized iron lined,  $3\frac{3}{4}$  in. bore, stroke  $10\frac{1}{2}$  in.,  
capacity 53 gallons per minute; each, - - - - - \$6 00

### No. 1 CYLINDER PUMP.

7 ft. long, 6 in. square, galvanized iron lined,  $3\frac{3}{4}$  in. bore, stroke  $10\frac{1}{2}$  in.,  
capacity 53 gallons per minute; each. - - - - - \$6 00

This Pump is generally used with extension pipe for deep wells, but can be used same as the No. 1.

### No. 2 PUMP.

6 ft. long, 5 in. square, galvanized iron lined, 3 in. bore, stroke 9 in.,  
capacity 32 gallons per minute; each, - - - - - \$5 25

No. 1, No. 2, and Stock Pumps, made with drop-check valves that can be drawn out at the top of the pump without disturbing it or the platform, 35 cents additional.

### LEVER HANDLE CISTERN PUMP.

6 ft. long, 4 in. square, 3 in. bore, galvanized iron lined, iron rod and  
bucket,  $6\frac{1}{2}$  in stroke; each, - - - - - \$4 50

### LEVER HANDLE CISTERN PUMP—Plain.

6 ft. long, 4 in. square, 3 in. bore, iron rod and bucket,  $6\frac{1}{2}$  in. stroke; each, \$3 85

### IRON CAP CISTERN PUMP—DRAW HANDLE.

6 ft. long, 4 in. square,  $2\frac{1}{2}$  in. bore, iron cap, rod, spout and bucket; each, \$3 15

### WOOD CISTERN PUMP—DRAW HANDLE.

6 ft. long, 4 in. square,  $2\frac{1}{4}$  in. bore, wood cap, rod and spout, iron bucket;  
each, - - - - - \$2 10



## PIPE FOR STOCK and No. 1 PUMPS.

4 in. square, 2 in. bore, taper joints; per foot, - - - - 14 cents

## PIPE FOR No. 2 and LEVER HANDLE PUMPS.

3½ in. square, 2 in. bore, taper joints; per foot, - - - - 11¼ cents

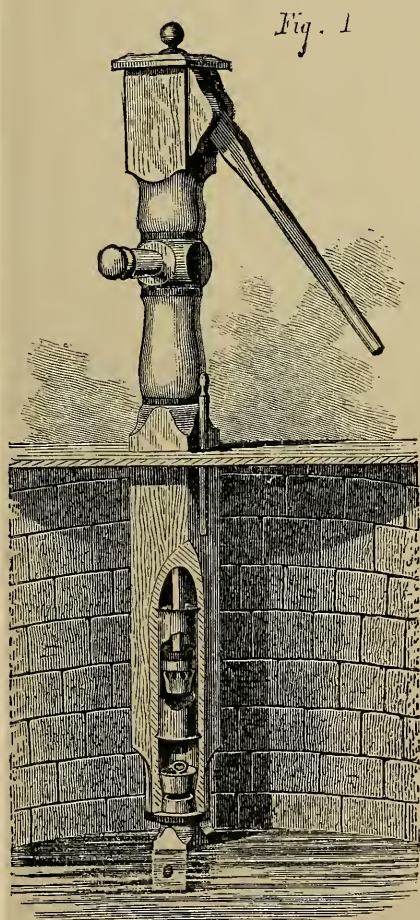
## PIPE FOR DRAW HANDLE CISTERN PUMPS.

3 in. square, 1½ in. bore, socket joints; per foot, - - - - 5¾ cents

## COUPLINGS FOR Nos. 1 and 2 STOCK PUMPS.

Including bands, each, - - - - 35 cents

Extension Pipe for deep wells, 6 in. square, 3¼ in. bore, to be used between the head and cylinder of No. 1 Cylinder Pumps.



## GENERAL DIRECTIONS.

Measure the depth of well from platform to bottom; if more than one piece of pipe is needed, join the pieces with a coupling; put the valve on the end of the pipe that goes into the bottom of the pipe. See that the valve seat on the end of the tubing is smooth and level before nailing on the valve. Should it be otherwise, the water will run down, and the pump need priming; bore four 1-inch holes about one foot from bottom of pipe. See that the holes are perfectly clear, and the shavings cleaned out. Band the couplings and drive the pipe together in them. Stand the pipe in the well; band the bottom of the pump and drive it onto the pipe; fix the platform around the stock to hold it stationary; prime it by pouring water into the top; put the cap on with screws or nails. Care should be taken to keep the cap on, as it prevents leaves and dirt from getting in. By keeping the vent open you prevent freezing in winter and get cool water in summer.

In wells where the water when lowest falls below 25 feet from platform use the No. 1 Cylinder Pump and extension pipe; take enough lengths of pipe to lower the cylinder within 16 or 18 feet of low water mark; take the cylin-



der out of the pump and drive extension pipe into the pump in its place, and drive cylinder into lower end of extension pipe, and lengthen rod so the plunger will work in metal lining of the cylinder; finish out with No. 1 Pipe, placing valve on top of piece of No. 1 Pipe that fits into cylinder, observing the same directions. Brace the pump in the well solid and firm, taking care not to drive any nails into the pipe.

The following important improvements (secured by letters patent) were introduced into our pumps. It is well known that the gradual wearing of the bore and the frequent renewal of packing the plunger requires, are serious objections against the common wooden pump. All these objections we successfully overcome by introducing into the pump a metallic spring lining, made of galvanized iron, which is practically indestructible. The top and bottom of lining (which is of sufficient length to give a bearing surface for the plunger) are turned out like the mouth of a trumpet and forced into the wood. This holds the lining (as shown in cut A) firmly in its place; at the same time the vertical joint is so constructed that it allows the spring lining to expand and contract with the shrinking and swelling of the wood, so that it always fits the bore of the body of the pump, and will not work loose. This is the only perfect method of putting sheet metal lining in wood pumps; all others are imperfect—as the water causes the wood to swell—increasing the size of the bore of the pump, the lining becomes loose and will work up and down with the plunger, and soon destroy its efficiency.

Our method gives us a smooth surface for the plunger to work in; will not wear out the packing on the plunger, or the bore of the pump in which the plunger plays, as in the case of the common or unlined article—thus making a pump that will outlast two or three of the ordinary kind. The plunger is the most perfect wooden one in use, combining the greatest strength, durability, and simplicity. The joints which connect the pipe to the pump and the couplings to connect the pipe are made tapering, which secures not only a permanent and perfect fit, but a fit the whole length of the joint instead of, as in the old method, an imperfect and short contact.

The length of the pump is such that the working parts are placed below the reach of frost in the coldest weather, the water being vented just above the bucket, so that, although the upper part of the pump is freed from water, the working parts remain immersed, and no priming is required in starting. These improvements are so cheaply applied that the cost is but slightly increased over that of the old style wooden pump. Our pumps are painted with ultramarine blue and striped with black, and for style, finish, workmanship and durability, they are not to be excelled by any in the market.

We insert the Lists of a few other Manufacturers of goods in which Hardware dealers are interested, believing that it will be to our mutual advantage to have the lists in a compact form for convenience of reference.

Your orders are solicited for any of the goods you may need, with the assurance that the prices will be the same the manufacturers will charge you, and usually saving you an extra package and drayage.

JAS. L. HAVEN & CO.

## JOHN H. MCGOWAN & CO.

134 West Second Street, between Race & Elm, Cincinnati, O.

MANUFACTURERS OF

### JOHN H. MCGOWAN'S PATENT PUMPS.

The "MCGOWAN" 1870 Patent Double Acting Hand and Power Pumps.

The "VICTOR" 1871 Patent Double Acting Hand and Power Pumps.

The "STAR" Patent Pump for Wells, Cisterns, and Driven Wells.

The Patent "I. X. L." Steam Pump, unexcelled as a boiler-feeder, as it has no "dead center."

JOHN H. MCGOWAN'S Patent Elastic Joint Railroad Tank Valves.

Also, RAILWAY AND MACHINISTS' SUPPLIES.

#### PRICE LISTS ON APPLICATION.

All Pumps fitted for wrought iron pipe unless otherwise ordered.

### THE "STAR" PATENT PUMPS.

For Wells, Cisterns, and Driven Wells.

The only Pump ever invented having a cylinder without BOLT or SCREW, and with the supply and delivery pipes connected together, which will work perfectly under all circumstances.

It never looses priming, consequently never needs to be primed to make it work.

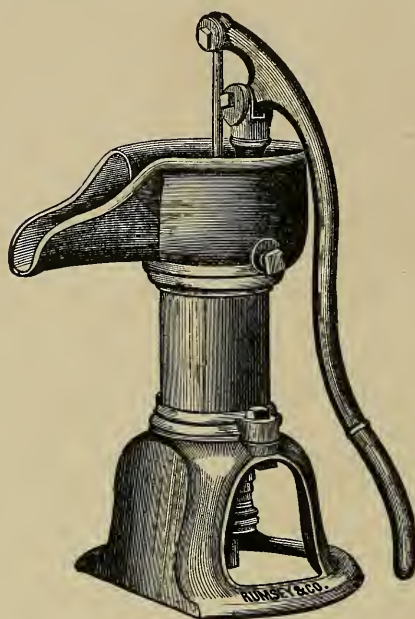
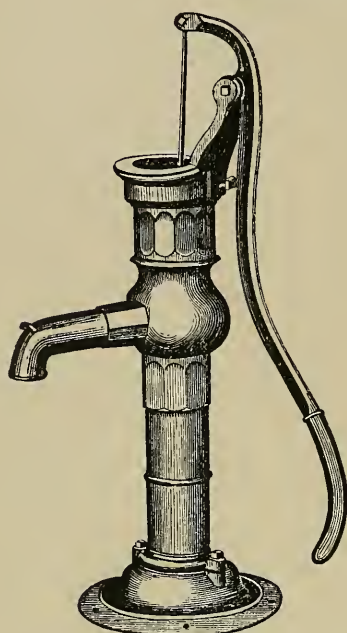
Sand will not prevent its operation. It will work when all others fail, and will not freeze.

No. 1,	Standard and Cylinder,	3	feet below base,	-	-	-	-	\$10 00
" 2,	"	3	"	-	-	-	-	10 50
" 3,	"	3	"	-	-	-	-	11 00
" 4,	"	3	"	-	-	-	-	11 50

All sizes are for 1½ iron pipe.

# CISTERN PUMPS.

NEW STYLES, WITH BOLT FASTENINGS.



WITH BASE, or TO ATTACH TO A PLANK.

No.	0	1	2	3	4
Diameter,	2¼	2½	2¾	3	3¼ inches.
Price,	\$3 50	4 00	4 50	5 00	5 50 each.

BRASS CYLINDER PUMPS, on Base.

Nos.	1	2	3	4
	\$6 00	7 00	8 00	9 00

PITCHER-SPOUT PUMPS.

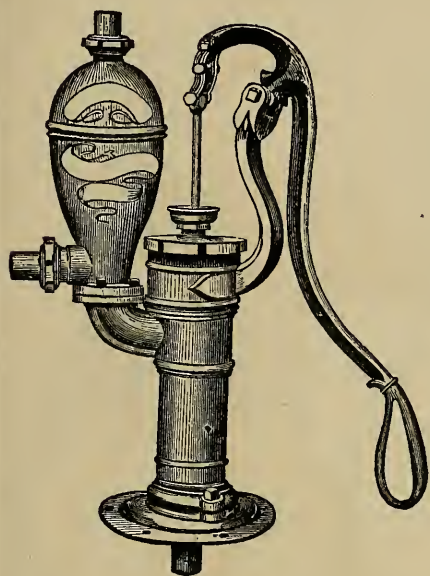
Nos.	0	1	2	3	4
Diameter,	2½	3	3½	4	4½ inches.
Price,	\$3 75	4 00	4 50	5 00	5 50 each.

HOUSE FORCE PUMPS—With Pitman and Guide.

No. 7, 2 inch cylinder, pitman and guide.	-	-	-	-	-	\$13 00
" 7, 2½	"	"	"	-	-	14 00
" 7, 3	"	"	"	-	-	15 00
" 7, 2	"	"	"	and air chamber,	-	14 00
" 7, 2½	"	"	"	"	-	16 00
" 7, 3	"	"	"	"	-	17 00

The air chamber with two discharges when ordered.

## LIFT AND FORCE PUMPS.



No. 0, 2 inch, on plank,	-	-	\$7 50
" 0, 2½ "	"	"	8 00
" 1, 2 " on base or plank,	7	50	
" 1, 2½ "	"	"	8 00
" 1, 3 "	"	"	9 00
" 2, 2 "	"	"	8 00
" 2, 2½ "	"	"	9 00
" 2, 3 "	"	"	10 00
" 3, 2 "	"	2 discharges,	9 00
" 3, 2½ "	"	2 "	10 00
" 3, 3 "	"	2 "	12 00
" 4, 2½ "	"	3 feet hose	
and pipe,	-	-	15 00
No. 4, 3 inch, on base, 3 feet hose			
and pipe,	-	-	16 00

Without hose and pipe a deduction of \$3 00 is allowed.

All of the above with brass piston rods at an extra cost of \$1 00 each.

## ANTI-FREEZING ENGINE and YARD WELL PUMPS.

## Standards with Cylinders Below Platforms.

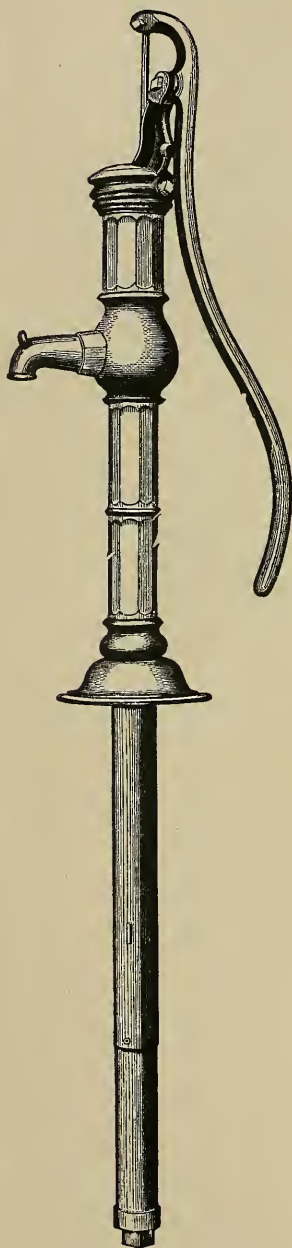
No 6, Engine Well Pump, with hose and pipe,	-	-	-	-	\$16 00
" 7, " " " " " "	-	-	-	-	18 00
" 8, " " " 3-inch cylinder, with hose and pipe,	-	-	-	-	20 00
" 8, " " " 4 " " " " "	-	-	-	-	22 00

Without hose and pipe a deduction of \$3 00 is allowed.

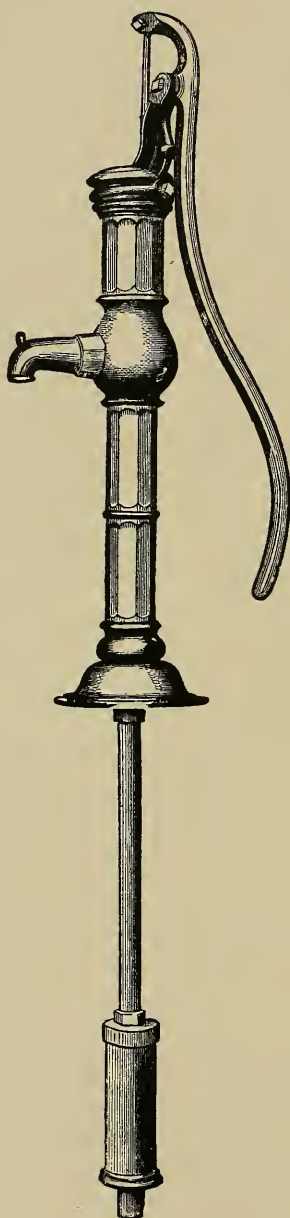
No. 4, Yard Well Pump, standard and cylinder,	-	-	-	-	\$10 00
" 5, " " " " " "	-	-	-	-	13 00
" 7, Tight Top Yard Well Pump, standard and cylinder,	-	-	-	-	15 00
" 6, Engine Well Pump, standard and cylinder,	-	-	-	-	16 00
" 7, " " " " " "	-	-	-	-	18 00
" 8, " " " " " "	-	-	-	-	20 00
" 20, Fountain Well Pump, standard and cylinder,	-	-	-	-	20 00
" 29, Yard " " with braces, standard and cylinder,	-	-	-	-	20 00
With 3 feet gas set length, when ordered. Extra,	-	-	-	-	1 50



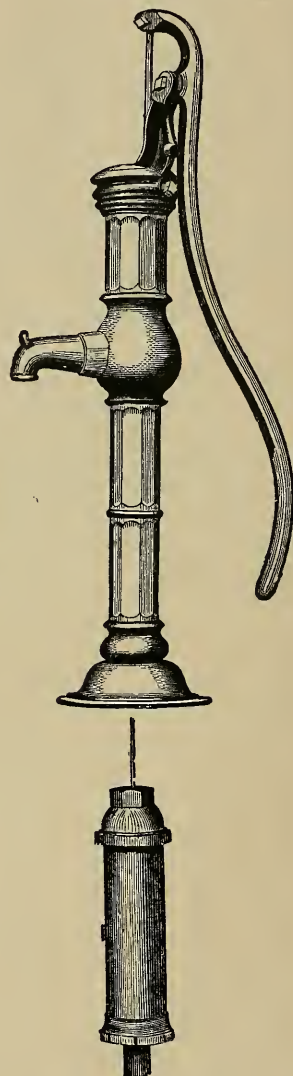
## ANTI-FREEZING CISTERN AND WELL PUMPS.



With Cast Iron Set  
Lengths.



With 3-foot Wrought Iron  
Set Lengths.



Standard and Cylinder.  
Cast for Wrought Pipe.

**PUMPS WITH CAST SET LENGTHS.**

No. 1,	2 inches diam.,	-	-	\$5 50
" 2,	2½	"	-	6 00
" 3,	2¾	"	-	6 50
" 4,	3	"	-	7 00
" 4½,	3¼	"	-	7 50

**PUMPS with WROUGHT SET LENGTHS.**

No. 1,	2 inches diam.,	-	-	\$6 00
" 2,	2½	"	-	6 50
" 3,	2¾	"	-	7 00
" 4,	3	"	-	7 50
" 4½,	3¼	"	-	8 00

**CISTERN & WELL PUMPS—Standards & Cylinders.****Cut for Wrought Iron Pipe, for Out-door Cisterns and Wells.**

No. 1,	Standard and Cylinder,	2 inches diameter,	-	-	-	-	\$5 50
" 2,	"	"	2½	"	-	-	6 00
" 3,	"	"	2¾	"	-	-	6 50
" 4,	"	"	3	"	-	-	7 00
" 4½,	"	"	3¼	"	-	-	7 50

**YARD WELL PUMPS—Anti-Freezing, for Out-doors.**

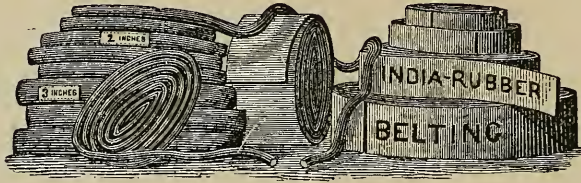
No. 1,	fitted for iron pipe,	-	-	-	-	-	-	\$7 50
" 2,	"	"	-	-	-	-	-	8 00
" 3,	"	"	-	-	-	-	-	9 00
" 4,	"	"	-	-	-	-	-	10 00
" 5,	"	"	-	-	-	-	-	12 00
" 7,	Tight Top Pump, for lead or iron pipe,	-	-	-	-	-	-	14 00
" 7,	"	"	4 inch cylinder, for lead or iron pipe,	-	-	-	-	15 00
" 8,	Large Stock Pump, with 5 inch cylinder, for cattle or stock wells, fitted for iron pipe,	-	-	-	-	-	-	16 00
" 8,	New Style Tight Top Large Lift Pump, 5 inch cylinder, for R. R. stations and stock wells,	-	-	-	-	-	-	18 00

**STRAINERS AND FOOT VALVES.****For Iron Pipes.**

	For Pipe,	1	1¼	1½	2	2½	3	3½	4 inches
	Strainers,	\$0 75	1 00	1 25	1 50	2 00	2 50		
	Strainers with Valves,	1 25	1 50	1 75	2 25	2 75	4 00	6 00	7 00

Foot Valves, for lead pipes, to order.

# VULCANIZED RUBBER BELTING.



## REDUCED PRICE LIST.

Our Belting is made of heavy Cotton Duck, coated with the best of India Rubber, and unaffected by *heat, cold or moisture*; and is preferred to Leather, or any other material, for *Elevators, Gin Bands, Agricultural Machines, Flouring Mills*, and for *many other purposes for which Belting is used*.

2-Ply Belting is for Agricultural Machinery, Railway Belts, or other light work.

Heavy 5- and 6 ply Belts made to order, for purposes where great strength is required, (as a substitute for double leather,) at an advance of 25 and 50 per cent. on 4-ply prices.

Special orders for Belts of any thickness and width can be executed within two weeks from the receipt of the order; but we keep no belts on hand heavier than "four ply," nor more than 20 inches in width. We have constantly on hand a very large stock, and can usually fill orders on the same day they are received.

In running Belts, protect them as much as possible from contact with animal oil, as it will have a tendency to decompose the rubber, and hence seriously injure the Belt.

### A Full Roll of Belting measures from 250 to 350 Feet.

Width. Inches.	2-PLY. Per Foot.	3-PLY. Per Foot.	4-PLY. Per Foot.	Width. Inches.	3-PLY. Per Foot.	4-PLY. Per Foot.
1 . .	7 cts. . .	8½ cts. . .	cts.	7 . . . .	60 cts. . . .	73 cts.
1¼ . .	8½ . .	9 . .		8 . . . .	70 . . . .	84
1½ . .	10 . .	13 . .		9 . . . .	80 . . . .	95
1¾ . .	13 . .	15 . .		10 . . . .	90 . . . .	107
2 . .	14 . .	17 . .	21	11 . . . .	100 . . . .	118
2¼ . .	16 . .	19 . .		12 . . . .	108 . . . .	130
2½ . .	17 . .	21 . .		13 . . . .	118 . . . .	142
2¾ . .	19 . .	24 . .		14 . . . .	128 . . . .	154
3 . .	20 . .	26 . .	31	15 . . . .	138 . . . .	166
3½ . .	24 . .	30 . .		16 . . . .	150 . . . .	178
4 . .	28 . .	34 . .	42	18 . . . .	170 . . . .	202
4½ . .		39 . .		20 . . . .	190 . . . .	226
5 . .		43 . .	52	22 . . . .	212 . . . .	252
5½ . .		48 . .		24 . . . .	236 . . . .	280
6 . .		52 . .	62			

Intermediate widths at proportionate prices.

## LEATHER BELTING.

OAK-TANNED,

PATENT-STRETCHED, CEMENTED AND RIVETED.

## REDUCED PRICES:

Width.		Per Foot.	Width.		Per Foot.	Width.		Per Foot.
1 in.,	-	5 cts.	6 in.,	-	47 cts.	16 in.,	-	145 cts.
1½ "	-	9 "	7 "	-	57 "	18 "	-	166 "
2 "	-	14 "	8 "	-	66 "	19 "	-	180 "
2½ "	-	17 "	9 "	-	75 "	20 "	-	195 "
3 "	-	20 "	10 "	-	83 "	22 "	-	215 "
3½ "	-	24 "	11 "	-	92 "	23 "	-	228 "
4 "	-	30 "	12 "	-	100 "	24 "	-	260 "
4½ "	-	34 "	13 "	-	110 "	25 "	-	280 "
5 "	-	38 "	14 "	-	120 "	26 "	-	320 "
5½ "	-	43 "	15 "	-	130 "	28 "	-	340 "

Double Belts, double price. Intermediate widths at proportionate prices.

## ROUND BELTING

⅛ inch,	-	-	per foot,	4 cts.	½ inch,	-	-	per foot,	20 cts.
3-16 "	-	-	"	7 "	⅝ "	-	-	"	25 "
¼ "	-	-	"	10 "	¾ "	-	-	"	30 "
⅜ "	-	-	"	15 "	1 "	-	-	"	40 "

## EXTRA QUALITY OF LACE LEATHER.

Belt Rivets and Burrs, Belt Hooks and Clamps, Belt Cement, &amp;c., and all other articles connected with Belting, supplied.

## DIRECTIONS FOR LACING VULCANIZED RUBBER MACHINE BELTING.

For narrow Belts, butt the two ends together, make two rows of holes in each end, (thus obtaining a double hold,) and lace with lacing leather.

For wide Belts, in addition, put a thin piece of leather or rubber on the back to strengthen the joint, equal in length to the width of the Belt, and sew or rivet it to the Belt.

In putting on this Belting, it should be stretched as tightly as possible, and with wide Belts this can be done best by the use of clamps secured firmly to each end of the Belt, and drawn together by bolts running parallel with and outside the edges of the Belt. There is no danger of breaking, as a belt six inches wide and three-ply thick will stand a direct strain of five thousand pounds, and other sizes in proportion.



# VULCANIZED RUBBER

## ENGINE, HYDRANT AND CONDUCTING HOSE.

Great improvements have been made in the manufacture of our Vulcanized Rubber Hose, combining strength, firmness and flexibility, which warrant us in asserting it to be *superior to any other made*. It is furnished in lengths of fifty feet, *and of any size and strength required*.

The sizes indicated in the list are the inner diameters, and each size will fully measure what it is marked. It is warranted never to become stiff by cold, and not to be affected by heat at 300 degrees Fahrenheit. It never, like leather, requires oiling, and is much less in price.

The 2-Ply Hose or Conducting Hose, is not calculated to stand much pressure.

The 3-Ply Hose (used for Hydrants, etc.,) is made to stand a pressure of 75 lbs. to the square inch.

The 4-Ply Hose, (used for Locomotives and for Leading Hose for Fire Engines and other purposes,) is made to withstand a pressure of 150 lbs. to the square inch.

Hose made specially to order for Steam Fire Engines and Steam Pumps, where unusual strength is required.

Internal Diameter.	2-Ply Conducting.	3-Ply Hydrant.	4-Ply Engine.
$\frac{1}{2}$ inch.	17	20	25 cents per foot.
$\frac{3}{4}$ "	25	30	37 " "
$\frac{7}{8}$ "	29	35	43 " "
1 "	33	40	50 " "
$1\frac{1}{4}$ "	42	50	62 " "
$1\frac{1}{2}$ "	50	60	75 " "
$1\frac{3}{4}$ "	58	70	87 " "
2 "	66	80	100 " "
$2\frac{1}{4}$ "	75	90	112 " "
$2\frac{1}{2}$ "	85	100	125 " "
$2\frac{3}{4}$ "	92	110	137 " "
3 "	100	120	150 " "

5-Ply Hose made to order at an advance of 25 per cent. on prices of 4 Ply.

## SUCTION HOSE FOR HAND AND STEAM FIRE ENGINES.

Made by a new and greatly improved process; and which, for service and efficiency, excels every other make.

3	3½	4	4½	5 inch.
\$6 00	7 00	8 00	9 75	11 50 per foot, on copper rings.
4 50	5 50	6 50	7 50	8 50 per foot, on galv'd iron rings.

## LEADING HOSE FOR STEAM FIRE ENGINES.

Made to order of superior quality, and highly recommended and preferred by the Chief Engineers of the various Fire Departments, and the Steam Fire Engine Builders.

Couplings, Hose Pipes, &c., furnished at the lowest prices.

## PATENT GAS TUBING.

From  $\frac{3}{4}$  to 1 inch in Diameter. Grain Drill Tubes.

## VULCANIZED RUBBER STEAM PACKING.

This article is now considered by Engineers and Machinists as indispensable wherever steam joints are to be made, as no substance has so much elasticity which stands so high a degree of heat. The Packing is made to be used in, and warranted to stand, at least 300 degrees of Fahrenheit.

### PRICES FOR STEAM PACKING.

About one yard in width, and in rolls of any length required.

	Per Pound.
MIXED OR FIBROUS PACKING, in sheets of all thicknesses, from 3-32 of an inch upward, - - - - -	\$0 50
Thinner sizes of same—say 1-16 of an inch and less, - - - - -	0 60
GUM PACKING, with Cloth Insertion, in sheets of all thicknesses, from 2-32 of an inch upward, - - - - -	0 55
Thinner sizes of the same—say 1-16 of an inch and less, - - - - -	0 65
GASKETS, FOR FIBROUS PACKING, for Man-hole Plates, Steam Chests, Cylinder Heads, &c., - - - - -	0 60
GASKETS, WASHERS, RINGS, ETC., of <i>Pure</i> Vulcanized Rubber, with or without Cloth Insertions, - - - - -	\$1 00 to 1 50
PURE VULCANIZED SHEET RUBBER, of all thicknesses and lengths, for Valves, Discs, Gaskets, Washers, Rings, etc., where great elasticity is required, - - - - -	1 00
EXTRA PURE VULCANIZED RUBBER VALVES, for Hot and Cold Water Pumps, Vacuum Pumps, Foot and Delivery Valves, etc., - - - - -	\$1 00 to 1 50
ROUND PACKING, with Duck outside, for Stuffing Boxes, Piston Rods, etc., from one-fourth of an inch to two inches diameter, - - - - -	0 80
SQUARE PISTON AND VALVE-ROD PACKING, of all sizes, cut to the most exact dimensions; very convenient, no trouble experienced in packing with it, and more durable than any other Packing ever used, - - - - -	0 80

Special orders for Gaskets, Valves, etc., of any size or pattern, that we do not keep on hand, can be executed within one week from receipt of order.

For cutting Rubber, use a sharp knife, and keep it wet.

## WOODROUGH &amp; M'PARLIN,

— MANUFACTURERS OF —

## PATENT GROUND SAWS,

Circular, Mill, Mulay, and Cross-Cut Saws,

HAND AND BACK SAWS,

BILLET, COOPER, AND POWER WEBS, ETC.

*Warehouse: Nos. 12 & 14 West Second St., Cincinnati.*

In ordering Circular Saws, please state size, number of teeth, thickness or gauge, size of holes, and log side of saw, as per cuts above.

## TERMS OF WARRANTY ON SAWS.

Each Saw is warranted as true as Saws can be made, and if found not to be so it will be exchanged, if returned before using. Any alteration in the holes of Circular Saws, by filing, reaming, or otherwise, will generally spring the Saw. When such alteration is made, the Saw will not be subject to the above warranty. If a Saw break in consequence of a flaw in the steel, or split at the teeth, owing to a seam in the steel, it will be exchanged for a new one, if returned in a reasonable time.

A Saw will not be exchanged for a new one after it has been gummed.

**CAUTION.**—The use of a cold chisel in re-toothing or altering "*Extra Cast Steel Tempered Saws*," will almost invariably crack the Saw. Saws breaking from such usage must not be considered as covered by our warranty.

# WARRANTED EXTRA CAST STEEL CIRCULAR SAWS.

Extra Tempered—Patent Ground.

Diameter.	All Gauges to	Each.	Each additional Gauge.	Each Gauge Tapered, Net.
4 inches	18	\$0 75	6 cents extra net	
5 "	18	95	"	
6 "	18	1 15	9	"
7 "	18	1 40	10	"
8 "	17	1 65	11	"
9 "	17	2 00	14	"
10 "	16	2 40	16	"
12 "	15	2 90	20	"
14 "	15	3 45	24	" \$0 30
16 "	14	4 25	28	" 40
18 "	14	5 00	34	" 55
20 "	13	6 10	40	" 70
22 "	12	7 15	48	" 85
24 "	12	8 50	55	" 1 00
26 "	11	10 60	65	" 1 15
28 "	11	12 70	80	" 1 35
30 "	10	14 85	90	" 1 50
32 "	10	17 00	1 00	" 1 65
34 "	10	19 15	1 20	" 1 80
36 "	9	22 30	1 40	" 2 00
38 "	9	26 60	1 75	" 2 20
40 "	8	30 80	2 00	" 2 40
42 "	8	37 25	2 50	" 2 60
44 "	7	44 50	3 00	" 2 80
46 "	7	53 25	3 50	" 3 00
48 "	6	61 50	4 25	" 3 25
50 "	5	71 00	5 00	" 3 50
52 "	5	84 00	5 75	" 3 75
54 "	5	96 50	7 00	" 4 00
56 "	5	117 00	8 75	" 4 25
58 "	4	138 00	10 00	" 4 50
60 "	4	160 00	12 00	" 4 75
62 "	4	186 00	14 00	" 5 00
64 "	4	213 00	16 00	" 5 25
66 "	3	245 00	18 00	" 5 50
68 "	3	277 00	20 00	" 5 75
70 "	3	314 00	22 00	" 6 00
72 "	3	356 00	24 00	" 6 25

Circular Board Saws ground tapering to any gauge.

Circular Saws made concave, double price. Circular Saws for Metal and Ivory, double price. Saws thinner than list gauge, extra price.

Thickness by Stubs' gauge is the standard referred to above.



## TOP CIRCULAR SAWS FOR DOUBLE MILLS.

24	26	28	30	32	34	36	inch diameter.
\$11 75	13 00	15 00	17 00	19 50	22 50	26 00	each.

## SHINGLE AND HEADING CIRCULAR SAWS.

(Tapering to No. 14 Gauge.)

36	38	40	42	44	inches.
\$31 00	36 00	43 00	55 00	70 00	each.

## PATENT INSERTED TEETH CIRCULAR SAWS.

Diameter.	Gauge.	To 20 Teeth	
48 inches	6	To 20 Teeth	\$130 00
50 "	5	" 20 "	145 00
52 "	5	" 20 "	160 00
54 "	5	" 24 "	185 00
56 "	5	" 24 "	205 00
58 "	4	" 24 "	230 00
60 "	4	" 24 "	260 00
62 "	4	" 24 "	290 00
64 "	4	" 24 "	325 00
66 "	3	" 24 "	360 00
68 "	3	" 24 "	400 00
70 "	3	" 24 "	440 00
72 "	3	" 24 "	485 00

For Saws with greater number of teeth than named above, add \$3.00 per tooth.  
Extra or Duplicate Teeth, \$1.50 each.

## INSERTING PATENT TEETH IN OLD SAWS.

To 60 inches diameter,	- - - - -	each tooth, \$4 00
Over 60 inches diameter,	- - - - -	" 4 50

## CIRCULAR SAW MANDRELS.

For 8	10	12	14	16	18	inch Saws.
\$8 00	9 00	10 00	11 00	12 00	14 00	each.
For 20	22	24	26	28	30	inch Saws.
\$15 00	17 00	18 00	19 00	20 00	21 00	each.

## WARRANTED CAST STEEL MILL SAWS.

No. 4	Gauge, or extra thick,	-	-	-	-	-	-	-	per foot, \$1	40
" 5	" thick,	-	-	-	-	-	-	-	"	1 30
" 6	" usual,	-	-	-	-	-	-	-	"	1 20
" 7	" thin,	-	-	-	-	-	-	-	"	1 10

## EXTRA TEMPERED MILL SAWS.

10 cents per foot advance on above prices.

## WARRANTED EXTRA CAST STEEL MULAY SAWS.

12 inch wide, No. 4	Gauge,	-	-	-	-	-	-	-	per foot, \$2	40
12	" " 5	"	-	-	-	-	-	-	"	2 25
12	" " 6	"	-	-	-	-	-	-	"	2 10
11	" " 5	"	-	-	-	-	-	-	"	2 10
11	" " 6	"	-	-	-	-	-	-	"	1 95

Wider sizes made to order.

## WARRANTED EXTRA CAST STEEL GANG SAWS.

Nos. 10, 11 or 12	Gauge, 8 inches wide,	-	-	-	-	-	per foot, \$1	00
" 13, 14 or 15	" 8	"	-	-	-	-	"	1 10

## WARRANTED CAST STEEL TAPERED DRAG SAWS.

(To No. 10 Gauge.)

Mill Saw Tooth (to cut one way),	-	-	-	-	-	per foot, \$1	00
Cross Cut " (to cut both ways),	-	-	-	-	-	"	1 00
Tuttle's Double-Hook Tooth,	-	-	-	-	-	"	1 15
Single-Hook Tooth,	-	-	-	-	-	"	1 05
Improved Pattern,	-	-	-	-	-	"	1 05

Equal width Drag Saws, 10 cents per foot extra.

Each thickness over No. 10 Gauge, 10 cents per foot extra.

If set and sharpened, 10 cents per foot extra.

(All above seven feet, advance 10 cents per foot).

## WARRANTED CAST STEEL PIT SAWS.

6	6½	7	7½	8	feet.
\$6 50	7 00	7 50	9 00	10 50	each.

No. 3 Gauge is	-	¼ inch thick	No. 11 Gauge is	-	½ inch thick
" 7	"	3-16	" 16	"	1-16

## WARRANTED CAST STEEL POWER SAWS.

To  $\frac{3}{4}$  inch wide; from 13 to 16 gauge in thickness. Over  $\frac{3}{4}$  inch wide, extra price.

12	14	16	18	20	22	24 inches.
\$3 00	3 50	4 00	4 50	5 00	5 50	6 00 per doz.
26	28	30	32	34	36	38 inches.
\$6 50	7 00	7 50	8 00	8 50	9 00	9 50 per doz.

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## WARRANTED CAST STEEL TURNING WEBS.

14	16	18	20	22	24 inches.
\$2 10	2 40	2 80	3 10	3 40	3 80 per doz.
26	28	30	32	34	36 inches.
\$4 10	4 40	4 80	5 20	5 60	6 00 per doz.

Above Webs from 19 to 22 gauge in thickness.

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## WARRANTED CAST STEEL FELLOE WEBS.

24	26	28	30	32	34	36	38 inches.
\$4 50	5 00	5 50	6 00	6 50	7 00	7 50	8 00 per doz.

Above Webs from 17 to 19 gauge in thickness.

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## FAY'S PATENT SCROLL SAWS.

8	9	10	11	12	13 inches.
\$3 00	3 25	3 50	3 75	4 00	4 25 per doz.
14	16	18	20	22	24 inches.
\$4 50	5 00	5 50	6 00	6 50	7 00 per doz.

Above Webs from 13 to 16 gauge in thickness; over  $\frac{3}{4}$  inch wide, extra price.

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## BAND OR BELT SAWS—All Lengths to 21 Feet.

$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	1 $\frac{1}{8}$	1 $\frac{1}{4}$	1 $\frac{1}{2}$ inch wide.
\$3 00	4 00	5 00	6 00	6 75	7 50	8 25	10 25	12 00	20 00 each.

## WARRANTED EXTRA CAST STEEL CROSS-CUT SAWS.

Above 8 feet in length, advance on following price 10 cents per foot.

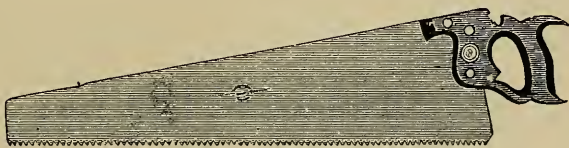
Tuttle's Patent Double-Hook Tooth, set and sharpened,	-	75	cents per foot
Single-Hook Tooth,	"	65	" "
Garver Pattern Tooth,	"	70	" "
Feather Edge,	"	70	" "
Usual Tooth,	"	65	" "
Cross-Cut Tangs and Rivets,	- - - - -	per dozen pairs,	\$2 00

## WOODROUGH & M'PARLIN'S PATENT CROSS-CUT HANDLES.

Patented February 28th, 1860.

Price, - - - - - per pair, \$1 00

## HAND, PANEL, AND RIPPING SAWS.



No. 0, "Farmer," 26in. C. S., 3 rivets,	- - - - -	per doz ,	\$9 00
" 1, "Buckeye," 26in. " beech hdl., pol. edges, 4 rivets,	- " - - -		12 00
" 3, "Hamilton," 26in. " " 4 " -	- " - - -		14 00
" 5, "John Hancock," 26in. C. S., walnut hdl., 5 iron screws,	- " - - -		17 00
" 7, W. & McP., 26in. C. S., beech hdl., pol. edges, 4 rivets,	- " - - -		21 00
" 7, " 28in. " " 4 " -	- " - - -		24 00
" 7, " 30in. " " 4 " -	- " - - -		27 00
" 8, " 26in. S. S., apple hdl., " 4 " -	- " - - -		23 00
" 8, " 28in. " " 4 " -	- " - - -		26 00
" 8, " 30in. " " 4 " -	- " - - -		29 00
Hand Saw Handles, No. 7,	- - - - -	"	2 25

## GENTS' PANEL SAWS—Extra Quality.

No. 7,	16	18	20	22	24	inches.
Price, \$11 00	12 00	13 00	15 00	17 50	per dozen.	



## WARRANTED CAST STEEL PRUNING SAWS.



Length,	14	16	18	20	22	24	inches.
Price, \$	8 00	9 00	10 00	11 00	12 00	13 00	per dozen.

## BACK SAWS.

W. & McP., 8in. C. S., beech hdl., pol. edges, blued steel bks.,	per doz.,	\$12 50
" 10in. " " " " " "		12 50
" 12in. " " " " " "		15 00
" 14in. " " " " " "		17 50
" 16in. " " " " " "		20 00
" 10in. S. S., apple hdl.,		14 00
" 12in. " " " " " "		16 50
" 14in. " " " " " "		19 00

## WARRANTED CAST STEEL COMPASS SAWS.

## Beveled Backs.



Length,	8	10	12	14	16	inches.
Price, \$	4 00	4 25	4 50	4 75	5 00	per dozen.

## MITCHELL'S PATENT COMPASS SAWS.



Pad Handle.



Pistol Handle.

Pad handles, with one blade,	-	-	-	-	-	per dozen,	\$4 50
Extra blades to fit ditto,	-	-	-	-	-	"	1 25
Pistol handles, with one blade,	-	-	-	-	-	"	6 50
Extra blades to fit ditto,	-	-	-	-	-	"	1 75

**BILLET or WOOD-CUTTERS' WEBS—30 Inch.**

No. 2, W. & McP., cast steel, usual tooth, set and sharpened,	per dozen,	\$5 00
" 2, " " peg " " " "	"	5 50
" 1, " " usual " " " "	"	6 00
" 1, " " peg " " " "	"	6 50
" 1, " ex. S. S., etch'd, usual t'th, set and sharp'd,	"	8 00
" 1, " " " peg " " " "	"	8 50
" 1, " Cooper's Webs, fine " " " "	"	6 25

No. 2, blades framed complete, - - - - - \$3 00 per dozen extra

No. 1 and No. 1 Ex., blades framed complete, - - - - - 3 50 " "

All framed Wood Saws put up in half dozen packages.

Saw Frames, - - - - - per dozen, \$2 50

Usual Saw Rods (thumb screw), - - - - - " 1 25

**POLE PRUNING SAW AND CHISEL.**

Price, - - - - - per dozen, \$10 00

**BUTCHERS' BOW SAWS.**

No. 1, Oval Backs,	18	20	22	24	inches.
	\$15 00	16 00	17 00	18 00	per dozen.
No. 2, Flat Backs,	16	18	20	22	inches.
	\$13 00	14 00	15 00	16 00	17 00 per dozen.
No. 3, Spring Backs,	12	13	14	15	inches.
	\$8 50	9 50	10 50	11 50	12 00 per dozen.

**BUTCHERS' BOW SAW BLADES.**

Length,	12	14	16	18	20	22	24	inches.
	\$3 25	3 50	3 75	4 00	4 50	5 00	5 75	per dozen.

## WARRANTED CAST STEEL KITCHEN SAWS.



12 inches, - - - - - per dozen, \$5 75

---

## WARRANTED CAST STEEL SAW KNIVES.



Price, - - - - - per dozen, \$5 00

---

## CAST STEEL HACK SAW BLADES.

8	9	10	11	12	13	14 inches.
\$3 75	4 25	5 00	5 75	6 50	7 25	8 00 per dozen.

---

Cast steel Key Hole or Fret Saw Blades,	-	-	-	-	per dozen,	\$1 25
Cast steel Compass Saw Blades,	-	-	-	-	"	1 75
Cabinet Scrapers,	-	-	-	-	"	1 20

---

## POND ICE SAWS.

With tiller and handle, complete, - - - - - each, \$9 00

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## HAND ICE SAWS.

For Wagon use, set and sharpened, - - - - - each, \$4 00

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## CIRCULAR SAW TABLES—For Cord Wood.

With 24 inch Circular Saw, - - - - - \$65 00

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## DOLE'S PATENT SAW GUMMER.

No.	1	2	3
Weight,	92	70	22 pounds.
Price,	\$30 00	25 00	20 00

## STONE'S PATENT SAW GUMMER &amp; UPSET PUNCH.

Gummer, with Cutter Grinder and two $\frac{3}{4}$ inch Bits,	-	-	-	-	-	-	-	-	-	\$20 00
Extra 1 inch Bits, each,	-	-	-	-	-	-	-	-	-	2 50
" $\frac{7}{8}$ " "	-	-	-	-	-	-	-	-	-	2 00
" $\frac{3}{4}$ " "	-	-	-	-	-	-	-	-	-	1 50
" $\frac{5}{8}$ " "	-	-	-	-	-	-	-	-	-	1 25
" $\frac{1}{2}$ or $\frac{3}{8}$ " "	-	-	-	-	-	-	-	-	-	1 00
Improved Upsets,	-	-	-	-	-	-	-	-	-	5 00

We have three sizes Cranks and Boxes, one for 1in. and  $\frac{7}{8}$ in. bits, one for  $\frac{3}{4}$  and  $\frac{5}{8}$ in. bits, and the other for  $\frac{1}{2}$  and  $\frac{3}{8}$ in. bits.

## CIRCULAR SAW GUMMERS—Old Style.

Gummer complete,	-	-	-	-	-	-	-	-	-	each, \$10 00
Extra Bits,	-	-	-	-	-	-	-	-	-	" 1 50
Upsets Punch, old style,	-	-	-	-	-	-	-	-	-	" 2 00

## MIXTER'S PATENT UPSET PUNCH.

Large Double, each,	-	-	-	-	-	-	-	-	-	\$8 00
Medium Single, "	-	-	-	-	-	-	-	-	-	6 00
Small Single, "	-	-	-	-	-	-	-	-	-	4 50
Brooks' Patent Saw Sets, large size,	-	-	-	-	-	-	-	-	-	4 00
" " small size,	-	-	-	-	-	-	-	-	-	3 00
Large Circular " each,	-	-	-	-	-	-	-	-	-	2 00
Small Emery Gummets, for shop use,	-	-	-	-	-	-	-	-	-	25 00
Duplicate Wheels, for shop use,	-	-	-	-	-	-	-	-	-	6 50

When ordering Bits, state the description of gummer they are intended for.

Full length of Bits for Stone's Gummer about  $3\frac{3}{4}$  inches.

Full length of Bits for Old Style about  $6\frac{1}{2}$  inches.

## WARRANTED CAST STEEL PLASTERING TROWELS.



Length,	10	10 $\frac{1}{2}$	11	11 $\frac{1}{2}$	12	12 $\frac{1}{2}$	13	13 $\frac{1}{2}$	inches.
	\$11 50	12 25	13 50	14 50	15 75	17 00	18 00	19 00	per doz.

Extra quality, advance \$2 00 on list.



## R. CUNNINGHAM,

Successor to A. C. CUNNINGHAM &amp; Co.

## EDGE TOOL MANUFACTURER,

Eighth Street, near Main, Cincinnati, Ohio.

## COOPERS' TOOLS.

Hoop Knives, 8 and 9 inch, - - - - -	per dozen, \$10 00
Stave " " " - - - - -	" 10 00
Hollowing Knives, 8 and 9 inch, - - - - -	" 10 00
Backing " " " - - - - -	" 10 00
Shaving " " " - - - - -	" 10 00
Paring " " " - - - - -	" 10 00
Champer, " for kegs, - - - - -	" 10 00
" " half-barrels, - - - - -	" 11 00
" " molasses barrels, - - - - -	" 13 00
" " pork and whisky barrels, - - - - -	" 13 00
" " hogsheads, - - - - -	" 15 00
Heading " 10 inch, - - - - -	" 10 50
" " 11 " - - - - -	" 11 00
" " 12 " - - - - -	" 12 00
" " 13 " - - - - -	" 13 00
" " 14 " - - - - -	" 14 00
" " 15 " - - - - -	" 15 00
" " 16 " - - - - -	" 16 00
" " 17 " - - - - -	" 17 00
" " 18 " - - - - -	" 18 00

Shingle and Wagon Makers' Knives, 8, 9, 10, 11, and 12 inches, same as Coopers'.

All long shank, \$1 00 per dozen extra.

Coopers' Adz, - - - - -	per dozen, \$18 00
Handled Adz, - - - - -	" 21 00
Handled and Checkered Adz, - - - - -	" 24 00
Broad Axes, - - - - -	" 18 00
Socket Drivers, - - - - -	" 9 00
Inshaves, - - - - -	" 9 00
Iron Froes, 9, 10, and 11 inch, japanned, - - - - -	" 5 00
" " 12 and 13 inch, iron, ground, - - - - -	" 10 00
Steel " 9, 10, and 11 inch, - - - - -	" 9 00
" " 12 and 13 inch, - - - - -	" 10 00

## CARPENTERS' TOOLS.

Broad Axes, - - per doz.,	\$26 00	Foot Adz, - - per doz.,	\$18 00
" medium, " 24 00		Gutter Adz, - - " 19 00	
Carriage Knives, 8 in, " 7 00		Ship Axes, - - " 30 00	
" 9 " " 7 50		" Adz, - - " 22 00	
" 10 " " 8 00		" Mauls, - - " 14 00	

Drawing Knives, same as Coopers'.

## PORK HOUSE AND SLAUGHTERING TOOLS.

Pork Cleavers, per pair,	\$10 00	Choppers, No. 6, - per doz.,	\$32 00
Lard " - " 9 00		" " 7, - " 33 00	
Choppers, No. 1, - per doz,	12 00	" " 8, - " 34 00	
" " 2, - " 15 00		Hog Scrapers, - " 9 00	
" " 3, - " 18 00		Selecting Hooks, - " 6 00	
" " 4, - " 21 00		Hog " - " 27 00	
" " 5, - " 26 00		Rib Spades, . " 27 00	

## MISCELLANEOUS TOOLS.

	Per dozen.		Per dozen.
Stone Hammers, 3 to 4 lbs.,	\$17 00	Extra Heavy Picks, - -	\$15 00
" 4 to 5 " 18 00		Light Picks, - - - -	13 00
" 6 to 7 " 19 00		Miners' Mattocks, - -	15 00
Tooth Hammers, 4½ to 6 lbs.,	27 00	Coal Picks, - - - -	8 00
" 6½ to 7½ " 30 00		Napping Hammers, - -	6 00
Brick Pavers' Hammers, -	14 00	Street Scrapers, - - -	24 00
Boulder Hammers, - -	18 00	Hemp Hooks, - - -	15 00
Stone Picks, - - -	18 00	Bung Borers, - - -	26 00
	Per pound.		Per pound.
Mash Hammers, all steel, -	50 cents.	Mill Picks, - - -	50 cents.
	Each.		Each.
Pump Augers, 1½ to 2 inches,	\$10 00	Pump Augers, 2¾ to 3 inches,	\$15 00
" 2¼ to 2½ " 12 00		Reamers, all sizes, - -	

## POST-HOLE AUGERS.

7 and 8 inch, - - - -	\$2 00	10 inch, - - - -	\$2 50
9 inch, - - - -	2 25	12 " - - - -	3 00

Machine Knives, Planer Knives, Lath Knives, Railroad Tools, of every description;  
Millwright Chisels and Extra Heavy Tools, of every variety, at short notice.

## HUDDART &amp; RIGDON,

MANUFACTURERS OF

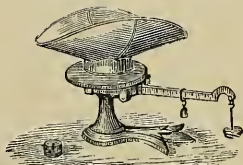
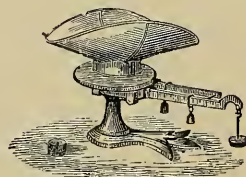
## HUDDART'S STANDARD SCALES,

**Brass and Iron Beams, Warehouse Trucks, &c.**

WAREHOUSE, No. 10 WEST SECOND STREET.

MANUFACTORY AND FOUNDRY, Nos. 600 &amp; 602 WEST FIFTH STREET.

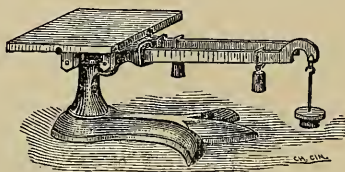
## GROCERS' SCALES.

**Single Beam.****With Tare Beam.**

Single Beam, brass scoop, weighing from $\frac{1}{2}$ oz. to 60lbs.,	-	-	-	\$13 00
" tin scoop, " " $\frac{1}{2}$ oz. to 60lbs.,	-	-	-	12 00
" brass scoop, " " $\frac{1}{2}$ oz. to 30lbs.,	-	-	-	10 00
" tin scoop, " " $\frac{1}{2}$ oz. to 30lbs.,	-	-	-	9 00
With Tare Beam, brass scoop, weighing from $\frac{1}{2}$ oz. to 63 lbs,	-	-	-	14 00
" " tin scoop, " " $\frac{1}{2}$ oz. to 63 lbs.,	-	-	-	13 00

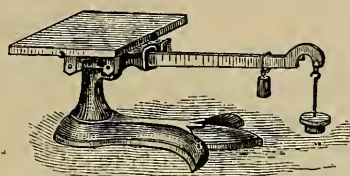
Weigh three pounds on the beam. With tare beam, the most convenient counter scale in use.

## MARBLE-TOP BUTTER SCALES—with Tare Beam.



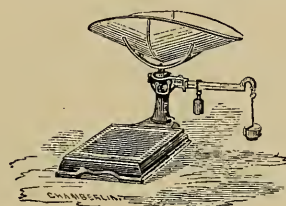
Weighing from  $\frac{1}{2}$  oz. to 63 lbs., - - - - - \$14 00

# MARBLE-TOP BUTCHERS' COUNTER SCALES.



Weighing from  $\frac{1}{2}$  oz. to 65 lbs., - - - - - \$15 00

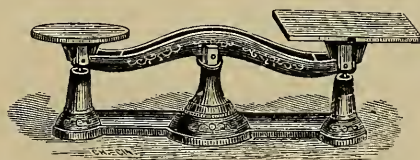
## UNION SCALES.



With brass scoop, weighing from  $\frac{1}{2}$  oz. to 244 lbs., - - - - - \$14 00  
 " tin scoop, "  $\frac{1}{2}$  oz. to 244 lbs., - - - - - 13 00

For general use a very convenient scale; the dish weighing from  $\frac{1}{2}$  oz to 44 lbs., and the platform from  $\frac{1}{2}$  oz. to 244 lbs., both with the greatest accuracy.  
 Size of platform  $10\frac{1}{2}$  by  $13\frac{1}{2}$ .

## BUTTER or BUTCHERS' BALANCES.



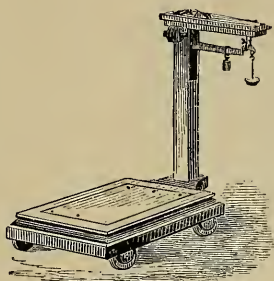
One Brass and one Marble Plate.

No. 1, with iron weights, - - - - - \$15 00  
 " 2, " " - - - - - 10 00

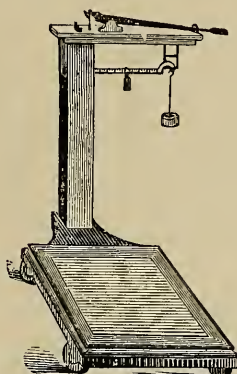




## PLATFORM SCALES.



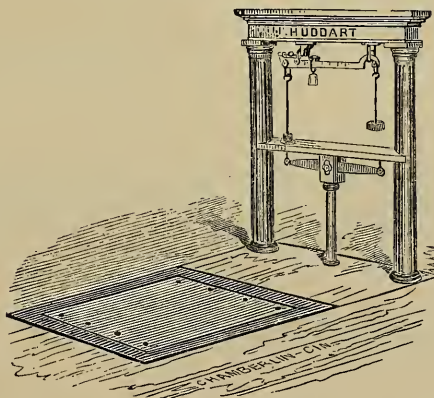
With Wheels.



With Wheels and Drop Lever.

				With Drop Lever.	Without Drop Lever.
No. 4,	capacity	400lbs.,	platform 15½ by 20½ in.,	- - -	\$24 00
" 5,	"	500lbs.,	" 17 by 22 in.,	- - -	26 00
" 6,	"	600lbs.,	" 17½ by 24 in.,	- - -	28 00
" 8,	"	800lbs.,	" 18 by 25 in.,	- \$35 00	33 00
" 10,	"	1000lbs.,	" 19½ by 26 in.,	- 45 00	40 00
" 12,	"	1200lbs.,	" 21 by 27 in.,	- 50 00	45 00
" 14,	"	1500lbs.,	" 23 by 28 in.,	- 60 00	
" 16,	"	1800lbs.,	" 24 by 30 in.,	- 65 00	
" 20,	"	2000lbs.,	" 25 by 32 in.,	- 70 00	
" 25,	"	2500lbs.,	" 27 by 34 in.,	- 75 00	

## WAREHOUSE SCALES.

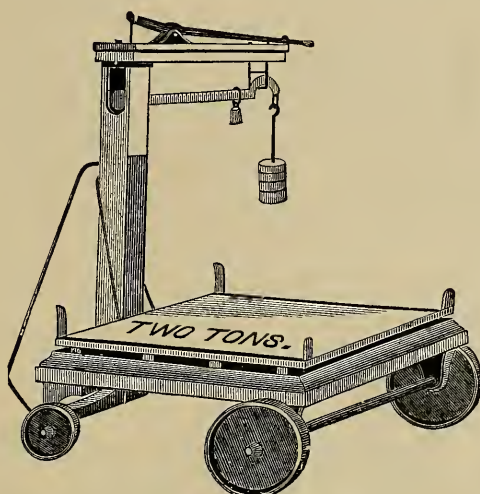


With Iron Columns. No charge for boxing.

No. 30,	capacity	3000lbs.,	platform 36½ by 32½ in.,	- - -	\$100 00
" 40,	"	4000lbs.,	" 44½ by 42½ in.,	- - -	115 00
" 50,	"	5000lbs.,	" 50½ by 48½ in.,	- - -	150 00



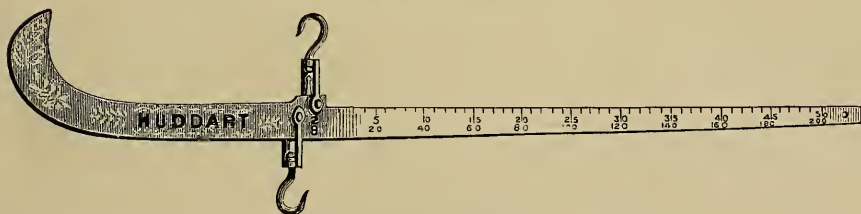
## ROLLING MILL AND FOUNDRY SCALES.



With Vibratory Axle.

No. 2, capacity 2500lbs., platform 35 by 28 in.,	-	-	-	-	-	\$85 00
" 3, " 3000lbs., " 38 by 30 in.,	-	-	-	-	-	100 00
" 4, " 4000lbs., " 43 by 32 in.,	-	-	-	-	-	140 00

## SCALE BEAMS.



No. 1, Extra Heavy Beams. Warranted.

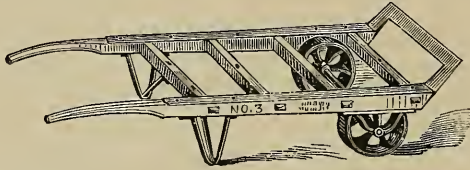
100, 150, and 200lb. Beams, each,	-	-	-	-	-	-	\$1 70
250lb. Beams,	-	-	-	-	-	-	1 90
300 to 1500lb. Beams, per hundred,	-	-	-	-	-	-	70

## WEIGHMASTERS' BEAMS AND FRAMES.

There is such a wide difference in what is wanted in various localities, that we can only give special prices.



WAREHOUSE TRUCKS.

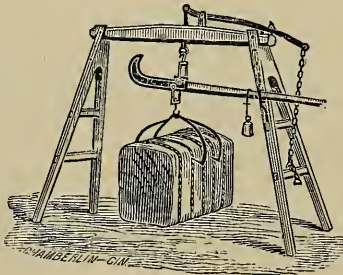


Bag Truck, bent handle,	-	-	-	-	-	-	-	each, \$6 00
No 1, " half ironed,	-	-	-	-	-	-	-	" 7 00
" 2, " "	-	-	-	-	-	-	-	" 8 00
" 3, " "	-	-	-	-	-	-	-	" 11 00
" 1, " full ironed,	-	-	-	-	-	-	-	" 9 00
" 2, " "	-	-	-	-	-	-	-	" 10 00
" 3, " "	-	-	-	-	-	-	-	" 14 00
" 4, " "	-	-	-	-	-	-	-	" 18 00
" 5, " " Coffee,	-	-	-	-	-	-	-	" 20 00
" 6, " " Railroad,	-	-	-	-	-	-	-	" 20 00
" 7, " " Cotton,	-	-	-	-	-	-	-	" 20 00
Railroad Baggage Trucks,	-	-	-	-	-	-	-	" 45 00
Grain Wagons, two wheels,	-	-	-	-	-	-	-	" 30 00
Warehouse Wagons, No. 1.	-	-	-	-	-	-	-	" 25 00
" " " 2.	-	-	-	-	-	-	-	" 28 00
Box Trucks, four wheels,	-	-	-	-	-	-	-	" 6 00

SKIDS.

6	7	8	9	10	feet.
\$4 00	5 00	6 00	7 00	8 00	each.

COTTON BEAMS, FRAMES, AND HOOKS.



800lbs., brass beam and weight,	-	-	-	-	-	-	price, \$
800lbs., polished iron beam, brass weight.	-	-	-	-	-	-	"
800lbs., japanned, iron weights,	-	-	-	-	-	-	"
600lbs., " "	-	-	-	-	-	-	"

# MACNEALE & URBAN,

MANUFACTURERS OF

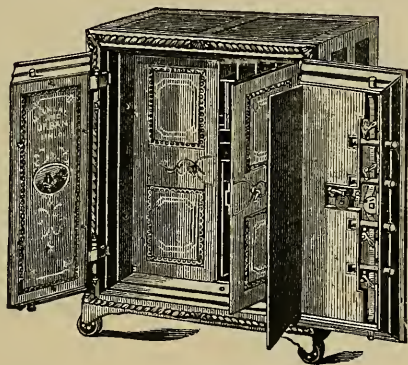
## FIRE & BURGLAR-PROOF SAFES & BANK LOCKS

Contractors to the U. S. Treasury.

Office and Salesroom: N. W. Corner Pearl and Plum;

Factory: South Side Pearl, between Elm and Plum;

CINCINNATI, OHIO.

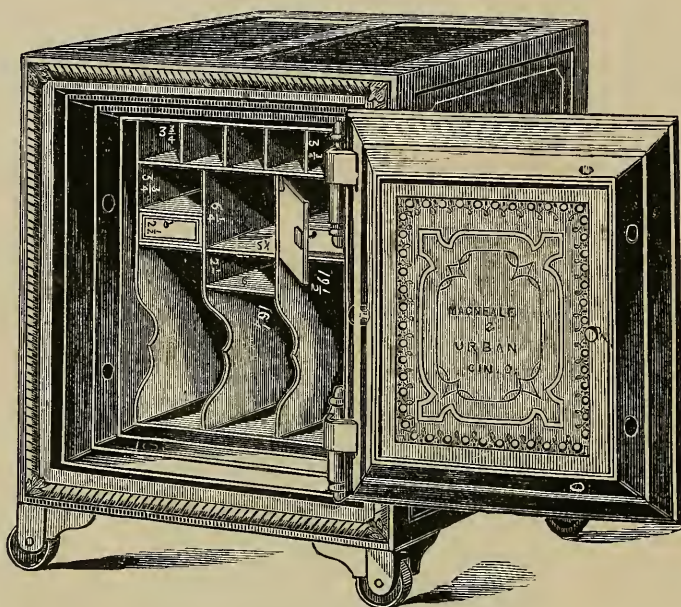


This cut represents our patent inside bolt-work, without which no safe is complete, and which renders ours the best ever manufactured. The bolt work on fire-proof safe doors is placed by all our competitors against the *OUTSIDE* plate of *THIN SHEET IRON*, whereas that of *ALL* safes of our manufacture is placed on the *inside* of the safe, protected from the operations of burglars by a *THICK* plate of *BOILER IRON*—and from fire by the wall of concrete, which protects all the contents—so that after our safes have been red-hot for hours the lock and bolts are in perfect order, and can be opened with the key, or dial, as if nothing had happened.

Our system of *INSIDE BOLT*, with hinged cap on the inside of the door, is the only valuable patent of which we have any knowledge on the bolt-work of fire-proof safes; and it derives its value, not only from its *form*, or *simplicity* of construction and *ease of operation*, nor from its being protected against the action of fire and burglars by the fire-proof concrete that envelopes it, but also from the facility with which the bolts and lock can be kept in good working order without the loss of time and expense of sending the door to a factory to have it cut open, in order to reach the bolts. As an exemplification, we never have one of our doors sent for repairs, while we are constantly receiving those of other makers to put in order or substitute new locks, the old ones having rusted out.

# FIRE-PROOF SAFES.

Class No. 1. Single Doors.



Size No. 9 of Class No. 1.—Outside measure, 50 $\frac{3}{4}$  in. high, 34 wide, and 26 deep.  
 Inside “ 30 $\frac{1}{2}$  in. “ 21 $\frac{1}{2}$  “ 14 “

Safes are divided into four classes :

Class No. 1, Single doors without inside iron doors.

“ “ 2, Single outside door with single inside iron doors.

“ “ 3, Folding doors without inside iron doors.

“ “ 4, Folding outside doors with folding inside iron doors.

Class No. 1 comprises safes Nos. 1 to 9, inclusive.

No. 1. The smallest of our regular list, is as thick as the others, and, therefore, as well adapted to stand the test of a long-continued fire.

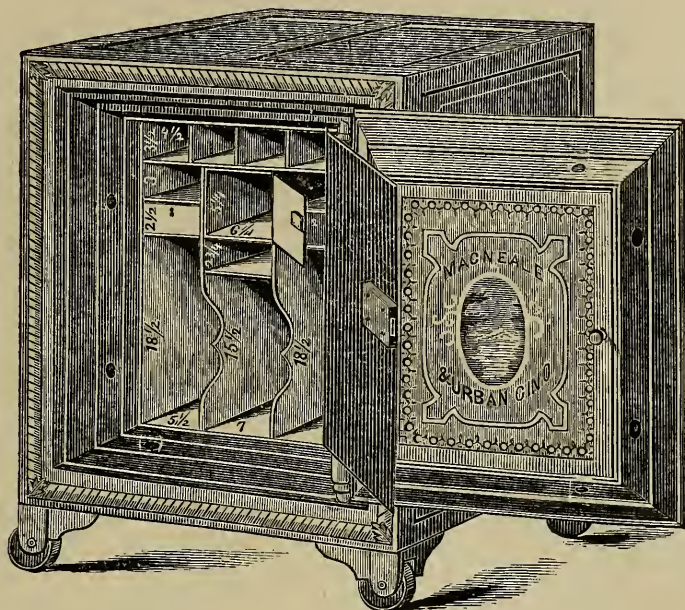
We make another safe of this class at a cheaper rate, which, from its lightness, weighing only 400 pounds, is admirably suited for family use. The inside measure is nearly the same as No. 1, but the shell is much thinner. This safe is not as well adapted to a severe test as No. 1, although no family dwellings contain sufficient inflammable matter to create heat sufficient to overcome its powers of resistance to the effects of fire.

No. 9 is the largest safe with single doors that we make without special order. The width of the door being from 20 to 26 inches, we substitute in the larger sizes folding doors, and thus avoid increased strain on the hinges, as well as the loss of space there would be in an office in order to leave room to open such a large door. All these safes are provided with a small iron box secured with a lock, and called a sub-treasury.



# FIRE-PROOF SAFES.

**Class No. 2. Single Doors, Outside and Inside.**



Size No. 14 of Class No. 2.—Outside measure,  $46\frac{1}{2}$  in. high, 30 wide, and  $27\frac{1}{2}$  deep.

Inside " 28 $\frac{3}{4}$  in. " 19 " 14 "

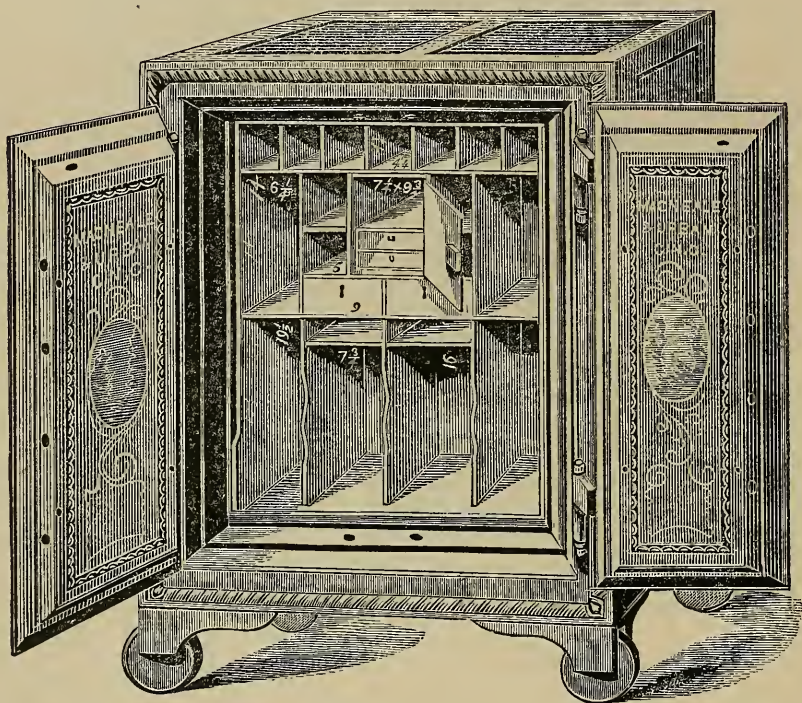
Class No. 2 comprises safes Nos. 10 to 14 inclusive, and are constructed with single outside doors; differing from class No. 1 by the addition of single inside iron doors, which not only afford an increased security, but a greater convenience, as, during a temporary absence from the office, it is only requisite to lock the inside door, while the heavy outside door can remain open. The inside doors are made of plate iron, and provided with good locks having duplicate keys. When both outside and inside doors are closed, an air chamber is left between them, which is advantageous during a severe and protracted fire, and a double security is afforded against the burglar.

All these safes have a sub-treasury.



# FIRE-PROOF SAFES.

Class No. 3. Folding Doors.



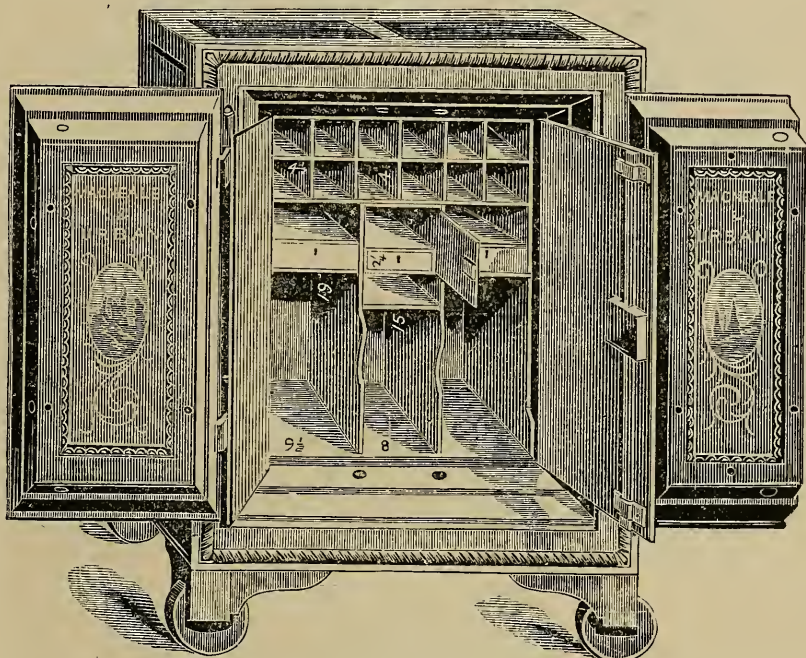
Size No. 16 of Class No 3.—Outside measure,  $58\frac{1}{2}$  in. high,  $41\frac{3}{4}$  wide and  $27\frac{1}{2}$  deep.  
 Inside “ 40 in. “ 32 “ 15 “

Class No. 3 consists of safes with folding doors, without any inside iron doors, and comprises Nos. 15 to 19 inclusive. We here remark that this class of safes follows, with regard to size, in the regular order of progression after Class No. 1, safe No. 9 (the largest of that class) being somewhat smaller than No. 15, the smallest of this.

In these safes space is afforded for the insertion of a “Burglar Box,” if required, without contracting, too much, that devoted to the use of books and less valuable papers; the burglar-box is constructed in the same manner as “Burglar-Proof Safes.” When a burglar box is not considered requisite, the sub-treasury, or small iron box, is placed near the middle of the safe, as represented in the plates, and thus its contents are well guarded from heat during the prevalence of fires.

# FIRE-PROOF SAFES.

## Class No. 4. Double Folding Doors.



Size No. 22 of Class No. 4.—Out side measure, 55 in. high,  $40\frac{3}{4}$  wide, and 29 deep.  
 Inside “  $34\frac{1}{2}$  in. “  $28\frac{1}{2}$  “ 14 “

Class No. 4, constructed with folding outside doors and folding inside iron doors. Nos. 20, 21, and 22, have not any bolts on the left-hand inside door; the right-hand door shuts over it, and is provided with a good lock that fastens three bolts, one of which passes into the left hand door, and the two others into the upper and lower portion of the frame of the safe.

The larger sizes, 23 to 27 inclusive, have on the left-hand doors two bolts, which are fastened with a lever (worked by hand, as represented in the plates,) into the upper and lower frame of the doors. The right-hand doors fasten as described above for Nos. 20 to 22 inclusive.

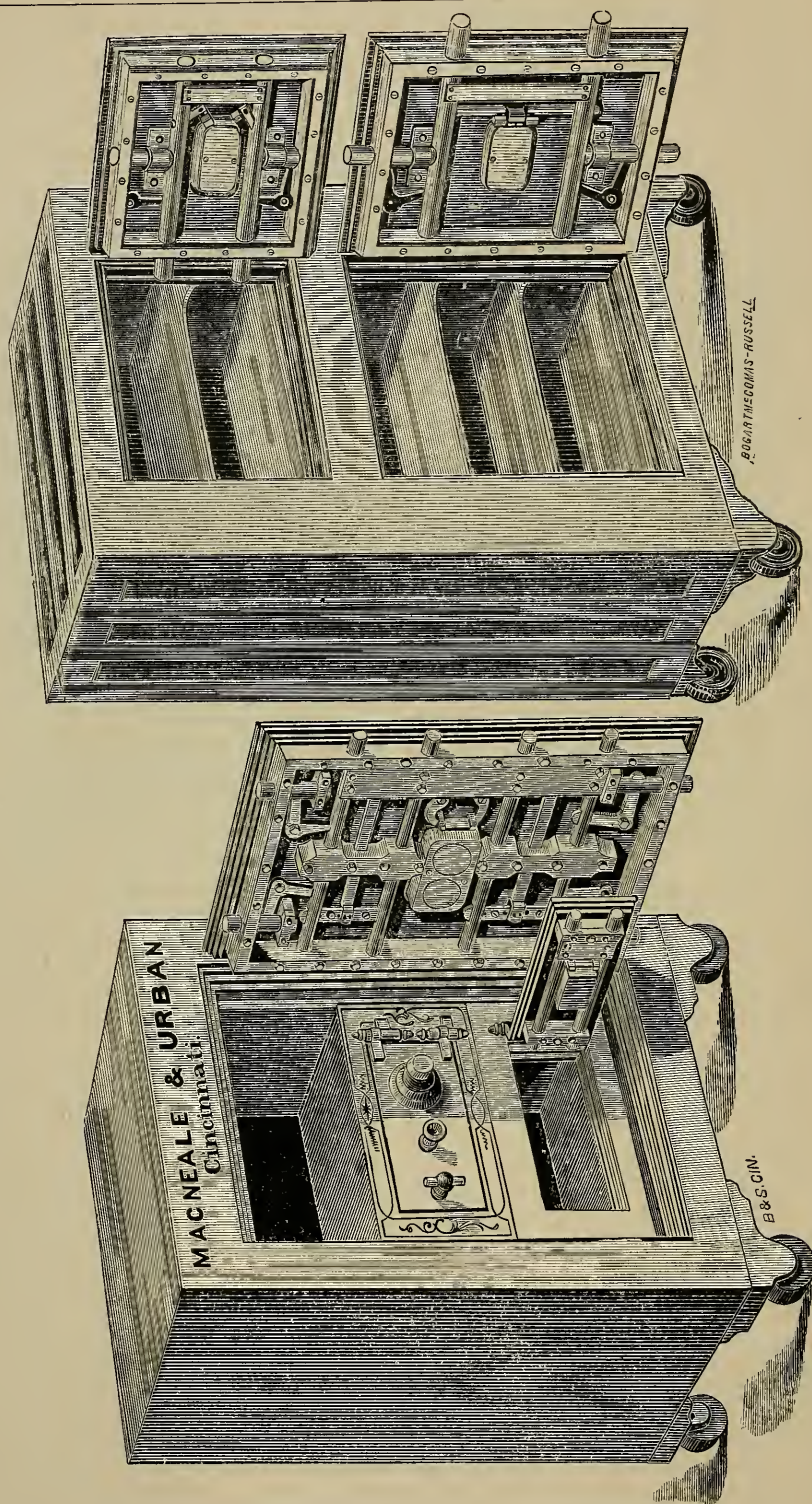
This class comprises our most perfect fire-proof safes. They are each provided with a sub-treasury. The doors being folding, they require little more room in the office than the actual size of the safe itself. The inside iron doors give convenience and increased protection. Ample space is given for a burglar-box. The safes of this class follow with regard to size after Class No. 2, in the same manner as class No. 3 follows Class No. 1.

The engravings represent the internal arrangement of the safes that our experience has enabled us to select as suitable for the majority of purchasers, but we can put in any other description of cabinet-work that may be desired.

If a burglar-box is required, it can be placed either in the upper, middle, or lower portion of the safe.



## BURGLAR-PROOF SAFES.



(Description on next page.)

## BURGLAR-PROOF SAFES.

The cuts on previous page represent BURGLAR-PROOF SAFES, which are composed of several plates of iron and steel placed alternately. We experimented on plates formed of the best cast spring steel, (which, it is well known, can be rendered drill-proof,) and of soft Bessemer steel, that has vast power of resistance, and have finally obtained a compound of hard and soft steel that we now use exclusively, and have specially manufactured. We consider our "Malacent" the best metal ever used in burglar-proof safes; being alternated with boiler iron, every three plates being secured together by riveted screws, and every *five* plates with our celebrated hard and soft conical screw bolts, (a double set being used in thick safes,) so located that no one bolt comes opposite another. We can guarantee entire security to Bankers, more especially as the excellency of our material is equaled in the details of construction.

The several plates of metal are put together with steel screws and rivets, and bolts that do not pass through more than three plates.

When great security is required, we construct these safes of eight, ten, or twelve plates, and use a double set of conical bolts, so arranged that no one bolt will pass through the entire thickness of the safe, and yet alternated so as to bind all the plates together in the most secure manner.

The Doors are the points of attack for burglars, and those of our safes are secure as any other portion. We attach the bolt-work by massive frames of wrought iron, secured by heavy conical bolts, and secure the spindles that operate the locks and the bolts from being driven in, pulled out, or fractured. We protect from the action of wedges and nitro-glycerine by accurately fitted offsets, or rebates, some of which are made in an angle shape, fitting into corresponding grooves, and forming the strongest kind of a knuckle joint; finally, the doors so constructed are secured by our justly and widely *celebrated Locks*, and when we place a burglar-box inside these safes, built in the manner above described, we obtain a receptacle beyond the ability of the most adroit burglar.

One cut represents a safe with two inner safes, affording double security.

The other represents a safe divided into two compartments, each having a separate door, for the convenience of a division of funds; each being under the control of different officers of the bank.

It is impossible in a brief space to detail the advantages we combine in the construction of our locks, but the fact that we are the *only Western firm* that ever was able to go into the Eastern market, and (notwithstanding the heaviest competition invited throughout the country) carry off the U. S. Treasury contract for Safes and Locks, is evidence they have merits that are recognized. Our locks have remained in the U. S. Treasury for years, subject to the attacks of professional lock-pickers.

**THEY HAVE NEVER BEEN PICKED, FORCED, OR EXPLODED.**

We furnish better security against fire and burglars than can be found in any other factory East or West; and, with forty thousand safes in daily use, tested every now and then by fire, and burglars, without one single instance of failure to preserve their contents, we stand prepared to challenge competition.

MACNEALE & URBAN.



# FIRE-PROOF SAFES.

WITH PATENT INSIDE BOLT WORK AND HINGED CAP.

CLASS.	No.	OUTSIDE MEASURE.			INSIDE MEASURE.			BURGLAR BOX.		
		High.	Wide.	Deep.	High.	Wide.	Deep.	High.	Wide.	Deep.
SINGLE DOORS, without Inside Doors,	1,	29 $\frac{3}{4}$	19	20 $\frac{1}{2}$	15	10	10	00	00	00 inches.
	2,	33 $\frac{1}{2}$	23 $\frac{3}{4}$	22 $\frac{1}{2}$	16 $\frac{3}{4}$	12 $\frac{3}{4}$	11			
	3,	34 $\frac{3}{4}$	26 $\frac{3}{4}$	22 $\frac{1}{2}$	17 $\frac{3}{4}$	15 $\frac{3}{4}$	11			
	4,	37	28	23 $\frac{1}{2}$	20	17	12			
	5,	39	28 $\frac{3}{4}$	23 $\frac{1}{2}$	21 $\frac{3}{4}$	17 $\frac{3}{4}$	12	12	17 $\frac{3}{4}$	10
	6,	41 $\frac{1}{4}$	29 $\frac{3}{4}$	24 $\frac{1}{2}$	23 $\frac{3}{4}$	18 $\frac{3}{4}$	13	12	18 $\frac{3}{4}$	11
	7,	44 $\frac{1}{4}$	31	24 $\frac{1}{2}$	26 $\frac{3}{4}$	19 $\frac{3}{4}$	13	12	19 $\frac{3}{4}$	11
	8,	47 $\frac{1}{2}$	33	26	27 $\frac{1}{2}$	20 $\frac{3}{4}$	14	12	20 $\frac{3}{4}$	12
	9,	50 $\frac{3}{4}$	34	26	30 $\frac{1}{2}$	21 $\frac{1}{2}$	14	24	21 $\frac{1}{2}$	12
SINGLE DOORS, with Inside Doors,	10,	34 $\frac{1}{2}$	23 $\frac{3}{4}$	24	19 $\frac{1}{2}$	14 $\frac{1}{2}$	11			
	11,	36 $\frac{3}{4}$	24 $\frac{3}{4}$	25	21	15 $\frac{1}{4}$	13	12	15 $\frac{1}{4}$	10
	12,	40 $\frac{1}{2}$	26	26	24	16	13	12	16	11
	13,	43 $\frac{1}{2}$	28 $\frac{1}{2}$	26	26	17 $\frac{1}{2}$	13	12	17 $\frac{1}{2}$	11
	14,	46 $\frac{1}{4}$	30	27 $\frac{1}{2}$	28 $\frac{3}{4}$	19	14	14	19	12
FOLDING DOORS, without Inside Doors,	15,	49 $\frac{1}{2}$	34 $\frac{1}{2}$	26 $\frac{1}{2}$	32 $\frac{3}{4}$	24 $\frac{3}{4}$	14	14	24 $\frac{3}{4}$	13
	16,	58 $\frac{1}{4}$	41 $\frac{3}{4}$	27 $\frac{1}{2}$	40	32	15	16	32	14
	17,	68 $\frac{1}{2}$	50 $\frac{3}{4}$	28 $\frac{1}{2}$	46 $\frac{1}{2}$	38	16	17	38	15
	18,	77 $\frac{1}{2}$	58 $\frac{1}{2}$	29 $\frac{1}{2}$	55	45	17	19	45	17
	19,	84 $\frac{1}{2}$	67 $\frac{3}{4}$	29 $\frac{1}{2}$	61 $\frac{1}{2}$	53 $\frac{3}{4}$	17	21	53 $\frac{3}{4}$	19
FOLDING DOORS, with Folding Inside Doors,	20,	46	36	27	26 $\frac{1}{4}$	24 $\frac{1}{4}$	13	14	24 $\frac{1}{4}$	12
	21,	50	36 $\frac{1}{4}$	28	30	24 $\frac{1}{4}$	14	14	24 $\frac{1}{4}$	13
	22,	55	40 $\frac{3}{4}$	29	34 $\frac{1}{2}$	28 $\frac{1}{2}$	14	14	28 $\frac{1}{2}$	14
	23,	60	41 $\frac{1}{2}$	30	39 $\frac{1}{2}$	32 $\frac{1}{2}$	15	16	32 $\frac{1}{2}$	15
	24,	67 $\frac{1}{4}$	49 $\frac{3}{4}$	30	45 $\frac{3}{4}$	37 $\frac{1}{4}$	15	17	37 $\frac{1}{4}$	16
	25,	74 $\frac{1}{4}$	55	31	49 $\frac{3}{4}$	39 $\frac{1}{2}$	16	18	39 $\frac{1}{2}$	17
	26,	77 $\frac{1}{2}$	58 $\frac{1}{2}$	33 $\frac{1}{2}$	55	45	17	19	45	18
	27,	84 $\frac{1}{2}$	67 $\frac{3}{4}$	34	61 $\frac{1}{2}$	53 $\frac{3}{4}$	17	21	53 $\frac{3}{4}$	19

We give the list of sizes and capacity of Fire-Proof Safes only. Unless specially contracted for, each contains a sheet iron box, called a "sub-treasury;" but a burglar box, made as described under "Burglar-Proof Safes," can be made to occupy part of the room, leaving still enough for books. The "burglar box" is always an extra charge, but fully compensates for its cost by the sense of security it gives.

Lists, containing further particulars and the price of Safe you may select, will be furnished on application.

Also, full list and descriptions of Burglar-Proof Safes, not built to resist fire.

Fire and Burglar-Proof Safes, made to resist both fire and burglars; the whole, or part, being burglar-proof.

Iron Vaults, to build with the brick work of the house; and Combination Locks, without key or key-hole.

## CINCINNATI BRUSH FACTORY.

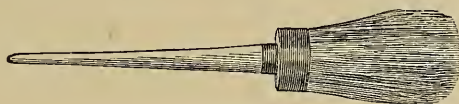
## R. S. CRAIG &amp; CO.

MANUFACTURERS OF

BRUSHES, MOPS, AND FEATHER DUSTERS,

211 WALNUT STREET, CINCINNATI, OHIO.

## PAINT BRUSHES.



## "STANDARD."

No. 7	6	5	4	3	2	1
\$1 25	1 50	2 00	2 25	3 00	3 75	4 50 per dozen.
No. 1-0	2-0	3-0	4-0	5-0	6-0	7-0
\$5 50	6 75	8 00	9 35	11 50	13 00	15 75 per dozen.

## "EXTRA."

Long, Selected Russian Bristles.

No. 7	6	5	4	3	2	1
\$1 50	1 75	2 25	3 00	3 75	4 50	5 50 per dozen.
No. 1-0	2-0	3-0	4-0	5-0	6-0	7-0
\$6 75	8 00	9 35	11 00	13 00	15 75	19 25 per dozen.

## "O. K."

All Pure White Russian Bristles.

No. 1-0	2-0	3-0	4-0	5-0	6-0	7-0
\$10 00	12 00	17 00	19 00	23 00	27 00	31 00 per dozen.

## OVAL VARNISH BRUSHES.



No.	6	5	4	3	2	1	1-0	2-0	3-0
	\$1 50	1 75	2 25	2 75	3 50	4 75	5 50	7 00	8 50 per doz.

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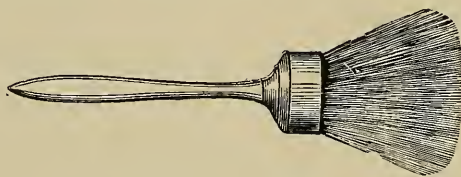
## EXTRA OVAL VARNISH.

All Pure French Bristles.

No.	6	5	4	3	2	1	1-0	2-0	3-0
	\$1 75	2 00	2 50	3 25	4 00	5 00	6 00	7 25	9 25 per doz.

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## PAINTERS' DUSTERS.



No.	1	2	3	4	5
	\$3 25	4 75	7 00	9 00	11 00 per dozen.

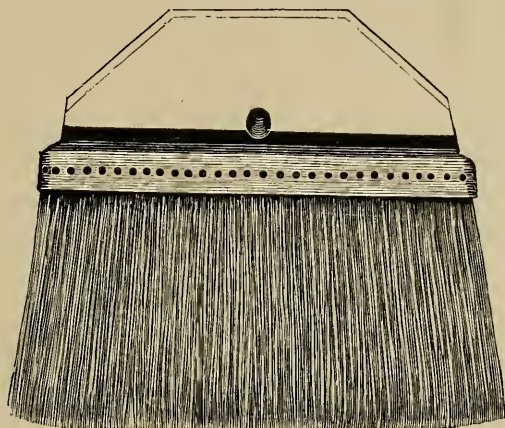
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## FRENCH SASH TOOLS.



No.	1	2	3	4	5	6	7	8
	85	1 15	1 45	1 75	2 00	2 30	2 60	3 00 per dozen.

## WHITE-WASH AND PLASTERERS' BRUSHES.



## "COMMON" WHITE-WASH.

No.	0	1	2	3	4	5	6	7
	\$2 75	3 25	4 25	5 25	5 50	6 75	7 50	8 50 per dozen.

## "STANDARD" WHITE-WASH.

## All Bristles.

No.	0	1	2	3	4	5	6	7	8	9
	\$3 00	4 00	5 00	6 00	7 00	8 00	10 00	12 00	14 00	16 00 per dozen.

## "RUSSIA" WHITE-WASH.

## All Russia Bristles.

No.	7	8	9	10	11	12
	\$20 00	25 00	37 00	38 00	47 00	52 00 per dozen.

## "O. K." WHITE-WASH.

## Made of the best White selected Russia Bristles.

No.	7	8	9	10	11	12
	25 00	32 00	38 00	48 00	55 00	64 00 per dozen.



## PLASTERERS' BRUSHES.

No. 1, leather bound, per doz.	\$12 00	No. 3, all white, per dozen, -	\$16 00
" 2, " " " " "	16 00	" 4, " " " "	20 00

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## PATENT PLASTERERS' BRUSHES.

## Metal Bound.

No. 7	8	9
\$14 25	19 50	24 75 per dozen.

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## O. K. COLORING BRUSHES.

## Leather Bound.

No. 7	8	9
\$32 50	42 90	53 35 per dozen.

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## O. K. PATENT COLORING BRUSHES.

## Metal Bound.

No. 7	8	9
\$15 75	22 75	30 00 per dozen.

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## PATENT KALSOMINE BRUSHES.

## Metal Bound.

No. 6	7	8
\$26 00	36 40	44 25 per dozen.

---

## STANDARD PASTE BRUSHES.

No. 3	3 1-2	4	4 1-2	5
\$6 00	7 00	10 00	12 00	15 00 per dozen.

---

## O. K. PASTE BRUSHES.

No. 3	3 1-2	4	4 1-2	6
\$7 00	8 50	12 00	15 00	18 00 per dozen.

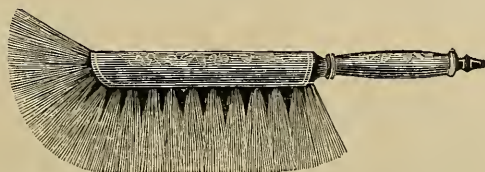
## PATENT O. K. PASTE BRUSHES.

## Metal Bound.

No. 3	3 1-2	4	4 1-2	5	5 1-2	6
\$6 00	7 00	10 00	12 00	15 00	18 00	21 00 per dozen.

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## HAND DUSTING BRUSHES.



No. 1	2	3	4	5
\$3 00	3 50	4 00	4 50	8 00 per dozen.

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## EXTRA HAND DUSTING BRUSHES.

## All Bristles.

No. 3, - - - per dozen, \$5 00 | No. 4, - - - per dozen, \$6 00

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## FANCY HAND DUSTING BRUSHES.

## All Bristles.

No. 1	2	3	4
\$5 00	6 00	7 50	10 00 per dozen.

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## DOUBLE DUSTING BRUSHES.

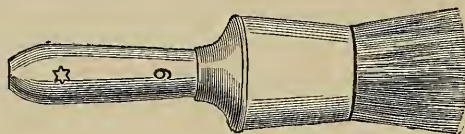
No. 1	2	3
\$6 00	8 00	10 00 per dozen.

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## MOULDERS' BRUSHES.

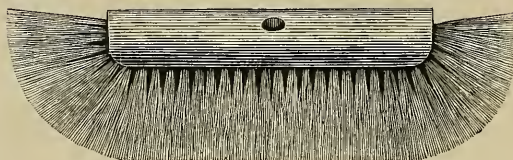
Single, - - - per dozen, \$4 85 | Double, - - - per dozen, \$6 50

## STENCIL BRUSHES.



No.	1	2	3	4	5	6	7	8	9	10
	\$2 25	2 75	3 25	4 00	4 75	5 75	7 00	8 00	8 50	10 50 per dozen.

## SWEEPING BRUSHES.



No.	1	2	3	4
	\$10 00	12 00	15 00	18 00 per dozen.

## HEARTH BRUSHES.

Handled.

No. 1,	-	-	per dozen, \$7 00		No. 2,	-	-	per dozen, \$9 00
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## WINDOW BRUSHES.



No.	1	2	3	4
	\$8 00	10 00	12 00	8 00 (short handle) per dozen.

## POPE'S EYE BRUSHES.

No. 1,	-	-	per dozen, \$6 00		No. 2,	-	-	per dozen, \$8 00
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## POPE'S HEAD BRUSHES.

No. 1, - - per dozen, \$9 50 | No. 2, - - per dozen, \$11 00

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## LAMP CHIMNEY BRUSHES.

No. 1, - - per dozen, 75 cts. | No. 2, - - per dozen, \$1 00

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## TUMBLER BRUSHES.

No. 1, - - per dozen, \$4 00 | No. 2, - - per dozen, \$5 00

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## CLOTH BRUSHES.

No.	1	2	3	4	5	6	7
	\$2 50	3 25	5 50	7 00	8 00	10 00	12 00 per dozen.

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## CRUMB BRUSHES.

Price, - - - - - per dozen, \$6 50

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## PLATE BRUSHES.

No.	2	3	4
	\$2 00	2 25	2 50 per dozen.

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## TANNERS' SCOURING BRUSHES.

No.	1	2	3
	\$6 00	8 00	11 00 per dozen.

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## PRINTERS' LYE BRUSHES.

Price, - - - - - per dozen, \$9 00



## SHOE BRUSHES.

No.	1	2	3
	\$2 00	2 50	2 75 per dozen.

## EXTRA SHOE BRUSHES.

All Bristles.

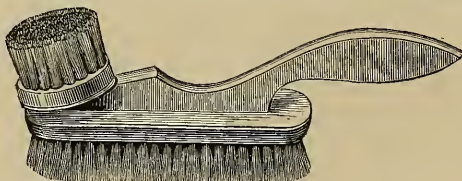
No.	0	1	2	3
	\$3 50	4 00	5 00	6 00 per dozen.

## HORSE HAIR SHOE BRUSHES.

All from Horse Hair.

No.	0	1	2	3	4	5
	\$3 75	4 25	5 00	6 00	8 00	10 00 per dozen.

## HANDLED SHOE BRUSHES.



No.	1	2	3	4	5	6
	\$2 00	2 50	3 25	5 00	5 50	6 50 per dozen.

## BLACKING DAUBERS.



No. 1,	-	-	per dozen, \$1 25		No. 2,	-	-	per dozen, \$1 75
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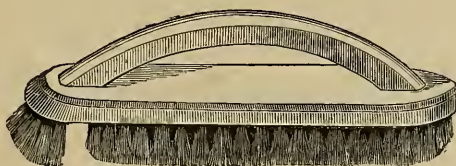
## TANNERS' BLACKING BRUSHES.

No. 1,	-	-	per dozen, \$4 00		No. 2,	-	-	per dozen, \$5 00
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## BREWERS' BRUSHES.

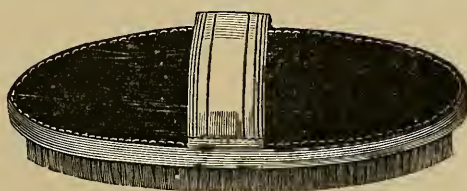
No.	0	1	2	3	4	Sea Root
	\$11 00	8 45	11 00	14 30	15 60	6 50 per dozen.

## STOVE BRUSHES.



No.	0	1	2	3
	\$2 25	2 75	3 50	4 50 per dozen.

## SOLE LEATHER HORSE BRUSHES.



No.	0	1	2	3	4	5
	\$12 00	16 00	18 00	24 00	33 00	41 00 per dozen.

## WOOD BACK HORSE BRUSHES.

No.	1	2	3	4	5	6
	\$2 50	2 75	3 50	5 00	6 00	7 00 per dozen.
No.	7	8	9	10	11	12
	\$8 00	10 00	11 00	12 00	14 00	16 00 per dozen.

## WHITE TAMPICO SCRUBBING BRUSHES.

No.	0	1	2	3
	\$1 50	1 75	2 00	2 25 per dozen.

## GREY TAMPICO SCRUBBING BRUSHES.

No.	0	1	2	3
	\$1 75	1 90	2 20	2 40 per dozen.

## EXTRA SCRUBBING BRUSHES.



## All Bristles.

No.	1	2	3	4	6
	\$2 25	2 50	3 00	3 50	4 00 per dozen.

## STEAMBOAT SCRUBBING BRUSHES.

No. 1, White Tampico, double ended,	-	-	-	-	-	per dozen, \$2 00
" 1, Grey	"	-	-	-	-	2 25
" 2,	"	-	-	-	-	2 50
" 2, extra,	"	-	-	-	-	3 00
" 3, "	"	-	-	-	-	4 00
" 4, "	"	-	-	-	-	5 00

## SASH SCRUBBING BRUSHES.

## White Tampico.

No.	1	2	3
	\$1 25	1 50	1 75 per dozen.

## All Bristles.

No.	1	2	3
	\$1 75	2 00	2 25 per dozen.

## CLAMP SCRUBBING BRUSHES.

## Plain Rubber.

No.	1	2	3
	\$3 50	6 00	7 00 per dozen.

## RATTAN STREET BROOMS.

No. 1, - - per dozen, \$6 50 | No. 2, - - per dozen, \$7 50

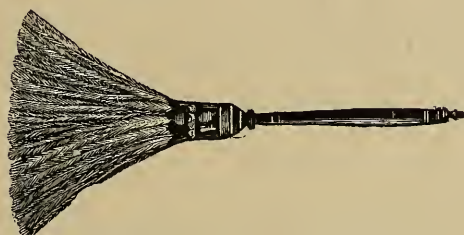
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## COTTON MOPS.

Standard, - - per dozen, \$7 00 | Full Weight, - - per dozen, \$8 00

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## BELL DUSTERS.



No. 5	6	7	8	9	10	11	12
\$2 50	3 50	6 00	9 00	14 00	17 00	20 00	23 00 per dozen.
No. 13	14	15	16	17	18		
\$26 00	29 00	31 00	31 50	32 00	32 50 per dozen.		
No. 19	20	21	22	23	24		
\$33 00	33 50	34 00	34 50	35 00	36 00 per dozen.		

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## PICTURE DUSTERS.

Soft White Feathers.

No. 5	6	7	8	9	10
\$10 00	12 00	16 00	20 00	24 00	29 00 per dozen.
No. 11	12	13	14	15	16
\$33 00	37 00	41 00	45 00	49 00	54 00 per dozen.

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## CARRIAGE DUSTERS.

Very full and heavy. Extra.

No. 1	2	3	4	5
\$34 00	40 00	46 00	53 00	60 00 per dozen.



# J. F. HARCOURT, Manufacturer of Tackle Blocks,

No. 135 EAST FRONT STREET,

**CINCINNATI.**

## LIGHT TACKLES—Iron Bushed, Steel Pins.

Size,	4½	5	6	7	8	9	10	11	12	inch.
Width of Mortise,	¾	¾	¾	1	1½	1½	1½	1½	1½	inch.
Price, Single,	\$1 10	1 25	1 50	1 75	2 00	2 50	3 00	3 50	4 00	each.
Double,	1 90	2 25	2 75	3 25	3 75	4 25	5 00	6 00	7 00	"
Triple,	2 50	3 00	3 75	4 25	5 00	6 00	7 00	8 00	9 00	"

## HEAVY TACKLES—Iron Bushed, Steel Pins.

Size,	6	7	8	9	10	11	12	13	14	inch.
Width of Mortise,	1	1	1½	1½	1½	1½	1½	1½	1½	inch.
Price, Single,	\$1 75	2 00	2 50	3 00	3 50	4 00	4 50	5 25	6 00	each.
Double,	3 00	3 50	4 00	4 75	5 75	7 00	8 25	10 00	10 50	"
Triple,	4 00	4 75	5 50	6 50	7 75	9 00	10 25	13 00	14 50	"

## HEAVY TACKLES—Wide Mortise.

Size,	6	8	10	12	14	inch.
Width of Mortise,	1	1½	1½	1½	2	inch.
Price, Single,	\$2 00	2 75	3 75	5 00	7 00	each.
Double,	3 25	4 50	6 65	9 00	12 00	"
Triple,	4 25	6 25	8 75	12 00	16 00	"

## SNATCH BLOCKS.

Size,	10	12	13	14	16	18	20	22	24	inch.
Width of Mortise,	1½	1½	1½	1½	2	2¼	2½	3	3½	inch.
Price, Light,	\$6 75	9 00	10 50	12 50	15 50	18 50	22 00	26 00	30 00	each.
Heavy,	7 50	10 50	12 00	14 00	17 00	20 00	25 00	30 00	35 00	"

HEAVY PURCHASE BLOCKS, on hand or made to order, for any sized rope.

**DAY & UDELL,**

No. 101 WEST FIFTH STREET, CINCINNATI, O.

MANUFACTURERS OF

**UDELL'S PATENT LADDERS****And Ladders of Every Description.****EXCELSIOR STEP LADDERS.**

3	4	5	6	7	8	10	12 feet.
\$2 25	2 50	3 00	3 50	4 00	4 50	5 00	6 00 each.

They are made of clear Norway pine, and the stiles are cut out of one piece of lumber, slotted and sprung outward, forming a truss without a glue joint, making the structure firm and durable, and mounted with malleable castings all screwed together, not nailed.

**UNIVERSAL LADDERS.**

Can be used as Step Ladders or Long Ladders.

As a Step Ladder,	6	7	8	9	10	12	14	16 feet.
When Extended,	10	12	14	16	18	22	26	30 "
Price, each,	\$4 00	4 50	5 00	5 50	6 00	7 50	9 00	10 00
Adjustable platform, for any size,	-	-	-	-	-	-	-	\$1 50

Upper section, with steps or rounds, as ordered.

**SHELF STEP LADDER.**

With Top Platform, but without Back Legs—for Stores, etc.

3	4	5	6	7	8	9	10	12 feet long.
\$2 00	2 50	3 00	3 50	4 00	4 50	5 00	5 50	7 00 each.

**PATENT EXTENSION LADDERS.**

The lap of 3 feet is not counted in giving the length.

From 30 to 38	40 to 48	50 to 60 feet long.
35	40	50 cents per foot.

**UDELL'S IMPROVED LONG LADDERS.**

Made of clear Norway Pine, with Hickory Rungs.

From 6 to 14	15 to 19	20 to 24	26 to 30	32 to 40 feet long.
15	20	25	30	50 cents per foot.

**H. BELMER & CO.**

Manufacturers and Dealers in

**WIRE AND WIRE GOODS,****No. 98 Walnut St., Cincinnati.****OAK HOOP SIEVES.**

Iron Meal Sieves, Nos. 14 to 16, - - - - -	per dozen, \$1 50
" " " 18 to 20, - - - - -	" 2 00
" " " 22, - - - - -	" 2 25
" " " 24, - - - - -	" 2 50
Plated Flour Sieves, No. 20, - - - - -	" 3 00
Brass Wire Sieves, " 18, - - - - -	" 5 00

Ash-rim Sieves, 10 cents per dozen higher.

3-bar Sieves, 10 cents per dozen higher than 2-bar.

**RIDDLES.**

Farmers' Grain Riddles, Nos. 2 to 18, - - - - -	per dozen, \$6 50
Moulders' Foundry Riddles, Nos. 2 to 16, - - - - -	" 7 00
" " " 4 to 10, galvanized, - - - - -	" 9 00
" " " 4 to 16, brass, - - - - -	" 15 00

All riddles scupper nailed at 50 cents per dozen advance.

**WIRE TRAPS.**

Rat Traps, 12 rib, - - - - -	per dozen, \$4 50
" 18 rib, - - - - -	" 5 50
Heavy, 18-rib, large, - - - - -	" 15 00
Square Spring, wood bottom, - - - - -	" 6 65
" wire " - - - - -	" 7 50
Mouse Traps, Bee Hive, - - - - -	" 2 50
Toy " with wheel, - - - - -	" 3 00
Hole " per dozen holes, - - - - -	37½ cents

## LIME AND SAND SCREENS.

Straight Bar, Nos. 3, 4, 5, each, \$5 00 | Wove Wire, - - - each, \$4 50

## CORN POPPERS.

Yankees, - - - - - per dozen, \$1 50  
 No. 1, wire or patent wood handle, - - - - - " 2 00  
 Round patent wood handle, - - - - - " 2 00

## DISH COVERS.

Round, blue or white, per set of 5, 90c. | Oval, blue or white, per set of 6, \$2 50

## WIRE CLOTH

Of all kinds on hand or made to order.

Iron Fan Mill Grade, - - - - - per square foot, 10 cents  
 Heavy Grade, for rolling screen, - - - - - " " 12 "  
 Heavy Twilled Spark Arrester Cloth, - - - - - " " 25 "  
 Wire Window Screens, in frames, - - - - - " " 35 "

## WIRE MOSS BASKETS.

Nos.	1	2	3	4	5	6	7	8	9
Price per dozen, -	\$2 25	2 50	3 75	3 50	4 00	3 25	3 00	4 00	4 00

Nos.	10	11	12	13	14	15	16	17	18
Price per dozen, -	\$5 00	6 00	7 00	8 00	9 00	10 00	12 00	15 00	16 00

Send for sheet of designs.

## FLOWER TRAINERS.

Nos.	1	2	3
Price per dozen, -	\$4 00	3 00	2 50



## WIRE SETTEES AND CHAIRS.

WIRE SETTEES, - - each, \$20 00 | WIRE CHAIRS, - - each, \$5 00

## JAPANNED BIRD CAGES.

All our Cages have the Patent Lock at the bottom. Send for price list and book of designs.

## CAGE BRACKETS.

Cage Brackets No. 1, per doz., \$2 00 | Cage Brackets No. 2, per doz., \$1 75

## WOOD, TINNED-WIRE BIRD CAGES.

No. 1, Mocking Bird,	- - - - -	per dozen, \$30 00
" 2, " "	- - - - -	" 27 00
" 1, Robin,	- - - - -	" 24 00
" 2, " "	- - - - -	" 21 00
Oblong, Canary,	- - - - -	" 18 00
Double Breeding, No. 1,	- - - - -	" 24 00
" " " 2,	- - - - -	" 21 00
Single Breeding,	- - - - -	" 18 00
Round Top, Canary, No. 2,	- - - - -	" 9.00
" " " 1,	- - - - -	" 10 00
" " Gallery,	- - - - -	" 12 00

Send for illustrated sheet.

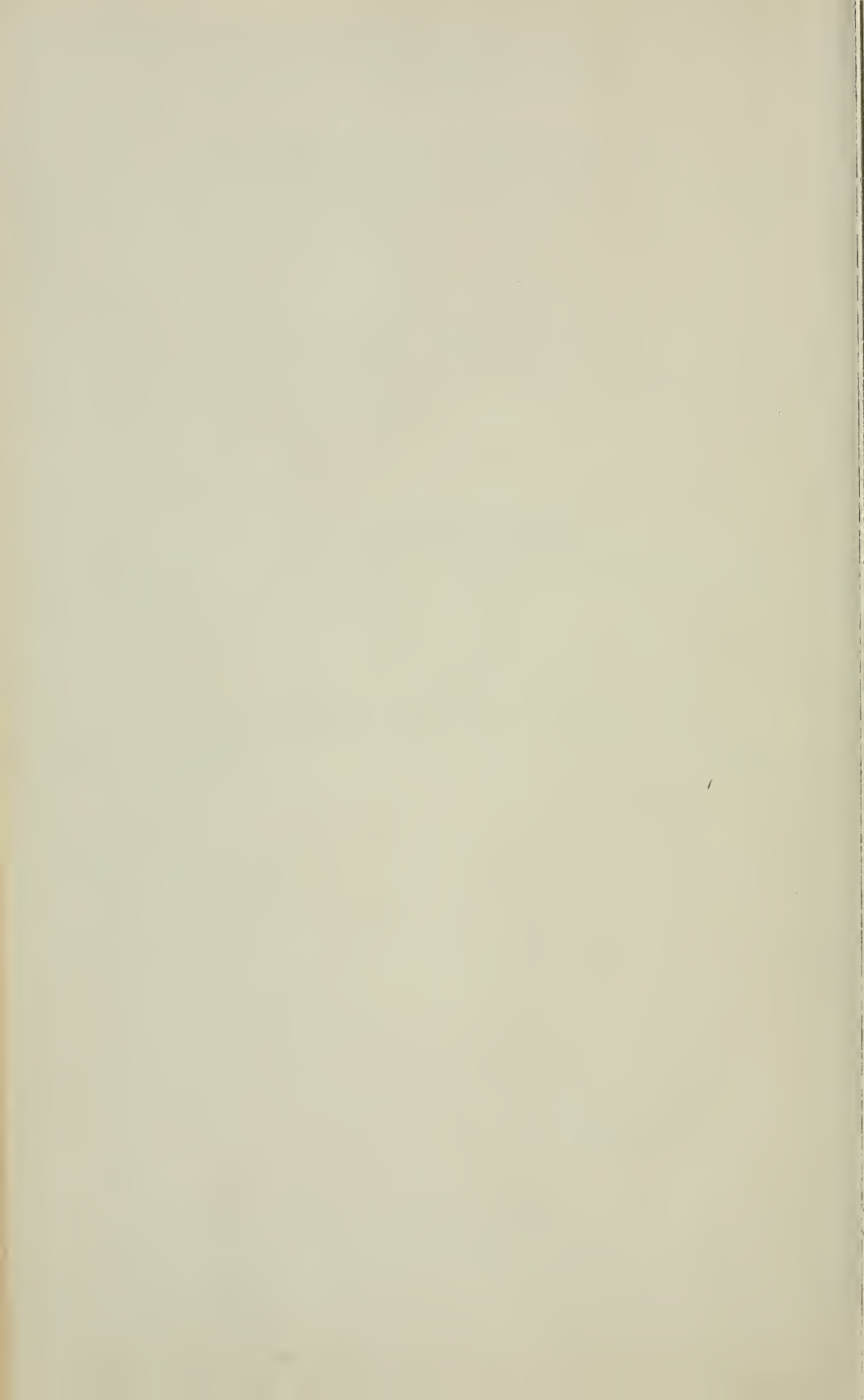
We warrant these cages superior to any in the market.

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We repeat that we will furnish you the goods of the manufacturers whose lists we insert at their prices, and will also fill the orders of our customers for any other Cincinnati manufactures on the most favorable terms, or will hand over orders, to be filled direct.

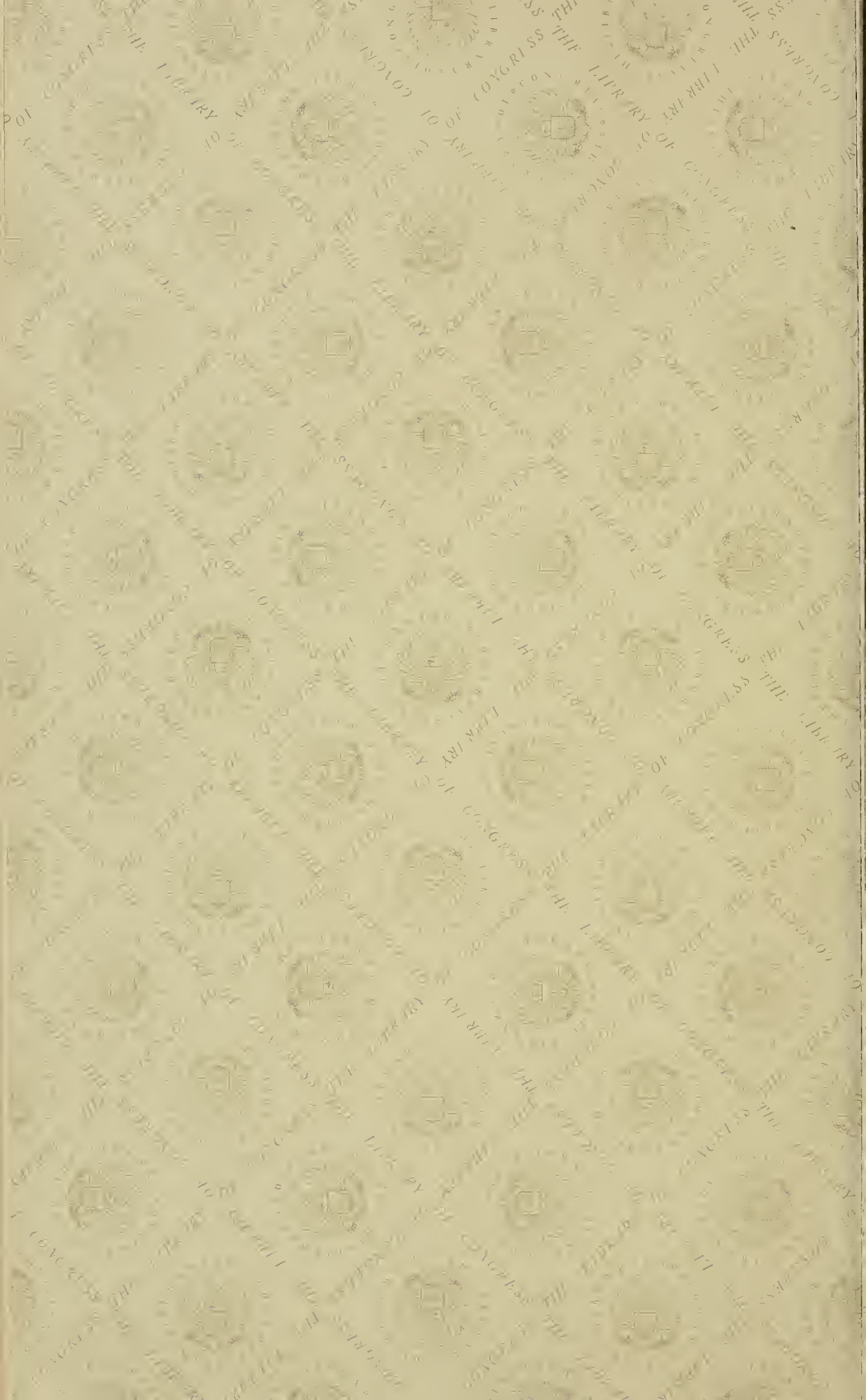
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